

PCT

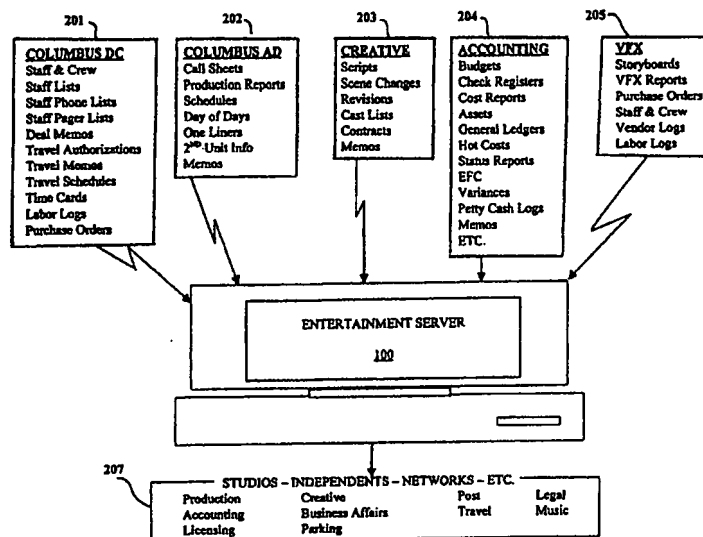
WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : <b>G06F 15/16</b>		A1	(11) International Publication Number: <b>WO 00/67139</b>
			(43) International Publication Date: 9 November 2000 (09.11.00)
(21) International Application Number: PCT/US00/11443			(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
(22) International Filing Date: 28 April 2000 (28.04.00)			
(30) Priority Data: 09/302,939 30 April 1999 (30.04.99) US			
(71) Applicant: CREATIVE PLANET INC. [US/US]; Suite 600, 5700 Wilshire Boulevard, Los Angeles, CA 90036 (US).			
(72) Inventor: HENSON, Rodney; 1910 Laurenwood Court, Thousand Oaks, CA 91362 (US).			
(74) Agent: OSTROW, Seth, H.; Brown Raysman Millstein Felder & Steiner LLP, 120 W. 45th Street, New York, NY 10036 (US).			Published With international search report.

(54) Title: SYSTEM AND METHOD FOR MANAGING FILM AND SHOW PRODUCTION



(57) Abstract

A computerized system and method to manage film and TV show production. The system includes a Department Coordinator module (201), an Assistant Director module (202), a creative module (203), an accounting module (204), and a visual effects module (205), with each module residing on network clients (110, 112, 114). The modules interact through a network (108) to which a server (100) is operatively connected and the server (100) executes a server application module (104) which interacts with the modules. Data is uploaded to the server (100) from each module and the server application (104) stores the data in a relational database system (RDBMS) (106) residing on the server (100). The data may be displayed to studio executives and other interested and authorized parties (207) over a network (108) or the Internet.

*FOR THE PURPOSES OF INFORMATION ONLY*

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

## SYSTEM AND METHOD FOR MANAGING FILM AND SHOW PRODUCTION

### COPYRIGHT NOTICE

5                   A portion of the disclosure of this patent document includes material which is subject to copyright protection. The copyright owner has no objection to the facsimile reproduction by anyone of the patent document or of the patent disclosure as it appears in the Patent and Trademark Office patent files or records, but otherwise reserves all copyright rights whatsoever.

### 10 BACKGROUND OF THE INVENTION

                  The present invention relates generally to a system and method for managing film and TV show production.

                  Producing and managing the production of movies and TV shows involve a complex structure of people, places, paperwork and the need to follow industry and union  
15 rules. Production managers and directors have the daunting task of carrying out production and management duties, over and above the creative process.

                  Exemplary duties which must be carried out on a daily basis during movie or show production include creating and distributing call sheets, lunch reports, production reports, and other vital reports for studios, and creating sometimes hundreds of purchase  
20 orders for equipment and other items needed for just one day's shooting. Keeping up with union rules alone for the multitude of different union laborers on a set in a day can be a virtually impossible task. However, keeping hour limitations and overtime costs on track can prevent production managers and directors from violating rules or having major cost overruns. In some cases, equipment does not arrive on a set in time for shooting due to a  
25 purchase order error, causing great expense if shooting cannot take place because a crew must still be paid for that day's missed work.

                  Currently, movie and show production is largely managed manually, taking a great amount of valuable time away from production management and directors who must deal with the aforesaid issues.

30                   Further, it takes a relatively long time to disseminate production information to production executives.

SUMMARY OF THE INVENTION

It is an object of the present invention to solve the known deficiencies of current systems.

It is another object of the present invention to provide a system and method for  
5 managing film and show production.

It is another object of the present invention to relieve production coordinators/managers and directors of time consuming administrative duties.

It is another object of the present invention to provide up-to-date production information to studio executives and authorized recipients of such information.

10 It is another object of the present invention to provide the production information over a network such as the Internet.

These and other objects are provided by a system and method for managing film and show production. A server computer includes a central processing unit for running a system application, which processes network transactions and issues common gateway  
15 interface (CGI) instructions to a relational database management system (RDBMS).

The server is connected to a network which may include the Internet, an intranet, a local area network, a wide area network, or the like. An Internet client, intranet client, kiosk unit, or a plurality of other network devices may be connected to the network for accessing the server.

20 A department coordinator (DC) module, also called the COLUMBUS DC or "DC" module, is downloaded to the coordinator's client. The DC module can be used in any one of the following production departments in a production entity, or in many such entities simultaneously: main production office, construction office, transportation, special effect, post department, etc. Within the DC module, a number of production reports can be created,  
25 including: Staff & Crew Lists, Staff Lists, Staff Phone Lists, Staff Pager Lists, Deal Memos, Travel Authorizations, Travel Memos, Travel Schedules, Time Cards, Labor Logs, Purchase Orders, and all other reports from the DC module. Department coordinators using the DC module may also electronically send any reports generated from their offices to the system either in ASCII format or in .PDF file format and loaded onto the server to be posted on the  
30 network or website.

An Assistant Director (AD) module, also called the COLUMBUS AD or "AD" module, is downloaded to all the assistant directors' and production coordinators' computers. The AD module creates call sheets and production reports on standardized forms. The reports produced by the AD module include Call Sheets and Production Reports, which  
5 may be distributed in an ASCII format or in .PDF file format. Other reports such as Schedules, Day of Days, One Liners, 2<sup>nd</sup> Unit Information, and Memos can be sent through other applications, for example, E-mail messaging systems. An assistant director using the AD module may also send any generated reports to the server either in ASCII format or in .PDF file format, and loaded onto the server to be posted on the network or website.

10 A Creative module is downloaded to a client. The creative module is used for uploading and saving all Scripts, Scene Changes, Revisions, Cast Lists, Contracts, and Memos, which are saved either in ASCII format or in .PDF file format. The documents saved in the creative module comply with known studio terminology and industrial terms of art. The documents saved by the creative module are electronically sent to the server either in  
15 ASCII format or in .PDF file format, and loaded onto the server to be posted on the network or website.

An Accounting module is downloaded to a client. Using the Accounting module, accounting data documents are created and saved to .PDF files for uploading to a server. The Accounting module uploads documents including: Budgets, Check Registers,  
20 Cost Reports, Asset Reports, General Ledgers, Hot Cost Reports, Status Reports, Estimated Final Cost (EFC) Reports, Variances Reports, Petty Cash Logs, and Memos, etc. The documents created and saved in the Accounting module comply with the studio terminology and/or generally known accounting principles. The documents saved in the accounting module are electronically sent to the server either in ASCII format or in .PDF file format and  
25 loaded onto the server to be posted on the network or website. Accounting departments working with standard accounting systems such as "VISTA" accounting systems by "ENTERTAINMENT PARTNERS" of Burbank, California, U.S.A., can generate cost reports that can be saved directly on the "VISTA" system, sent to the server and posted for the most accurate information.

A Visual Effects (VFX) module is downloaded to a special effects department client component of the system. Using the VFX module, documents generated within the special effects department are logged, tracked and electronically sent to the server either in ASCII format or in .PDF file format, and loaded onto the server to be posted on the network or website. The documents generated by the VFX module include: Storyboards, VFX Reports, Purchase Orders, Staff & Crew Reports, Vendor Logs and Labor Logs. The server stores all documents sent to it from the modules described herein. The system application tracks and disseminates all files to the network or website.

A web or network output module, such as a browser and/or a graphic user interface (GUI), is provided so that Studios, Independents, Networks, etc., using the system may access the reports produced by the various modules as described herein. Using web clients, the studios can view documents on the server. Password protection keeps outsiders or unauthorized personnel from viewing confidential documents.

The system provides a service which delivers production data directly from a production office anywhere in the world, to the studio executive, studio-wide network, or any offices connected to the Internet and/or the World Wide Web (WWW). The server receives data from the Department Coordinator module, the Assistant Director module, the Creative module, from the Accounting module, and from the VFX module. The data is organized by the system application. The data is then posted in a website content area for display on the website stored on the server.

All information saved on the server is backed up frequently to avoid losing files due to system malfunction. The website is password protected to ensure safety and confidentiality.

Three of the modules are specifically designed for the system of the present invention to mirror production protocols: the DC module, AD module and VFX module. Formatted data from each of these modules, apart from the .PDF format files, can be exported from the specific client on which they are each resident, and sent electronically to be uploaded to the server. The formatted data is organized and stored into the RDBMS system by the system application after receipt by the server.

Further, any printable document can be sent to the server and put on-line for studio executives to view.

#### BRIEF DESCRIPTION OF THE DRAWINGS

For a fuller understanding of the invention, reference is made to the following  
5 description taken in connection with the accompanying drawings, in which:

FIG. 1 shows a block diagram representing a system hardware overview of an embodiment of the present invention;

FIG. 2 shows a block diagram representing a system module overview of the present invention;

10 FIG. 3 shows a flow diagram representing the overall data flow for the system of the present invention;

FIG. 4 is a screen shot illustrating an initial opening screen for a DC module;

FIG. 5 is a screen shot of an exemplary Staff & Crew sub-module screen for creating a Staff & Crew list;

15 FIG. 6 is a screen shot of an exemplary Staff & Crew report sub-module screen for printing a Staff & Crew report;

FIG. 7 is a screen shot of an exemplary Deal Memo sub-module screen for creating a Deal Memo;

20 FIG. 8 is a screen shot of an exemplary Deal Memo report sub-module screen for printing the Deal Memo;

FIG. 9 is a block diagram illustrating the steps for exporting formatted data from the DC module;

FIG. 10 is a screen shot of an exemplary screen for creating travel authorizations;

25 FIG. 11 is a screen shot of an exemplary screen for printing a travel authorization;

FIG. 12 is a screen shot of an exemplary Purchase Order screen for creating a purchase order;

FIG. 13 is a screen shot of an exemplary screen for printing purchase orders;

30 FIG. 14 is a screen shot of an exemplary Daily Labor Sheet screen;

FIG. 15 is a screen shot of an exemplary Labor Report screen;  
FIG. 16 is a screen shot of an exemplary Project Tracker screen;  
FIG. 17 is a screen shot of an exemplary Projects Reports screen;  
FIG. 18 is a diagram illustrating some buttons which have universal  
5 application from screen to screen throughout the system of the present invention;  
FIG. 19 is a block diagram illustrating a database schema of the DC module;  
FIG. 20 is a block diagram illustrating a flow chart illustrating the process of  
setting up and using the DC module;  
FIG. 21 is a screen shot of an exemplary opening screen for an AD module;  
10 FIG. 22 is a screen shot of an initial first page of a Preferences screen for the  
AD module;  
FIG. 23 is a screen shot of a second page of the Preferences screen of FIG. 22;  
FIG. 24 is a screen shot of an exemplary Cast List screen for a Cast List sub-  
module;  
15 FIG. 25 is a screen shot of an exemplary Scene List screen;  
FIG. 26 is a flow diagram illustrating a method for importing data from the  
MOVIE MAGIC SCHEDULING SYSTEM;  
FIG. 27 is a flow diagram illustrating a method for creating a call sheet with  
the system of the present invention;  
20 FIG. 28 is a diagram illustrating screen elements of the AD module for  
creating a production report;  
FIG. 29 is a block diagram illustrating a database schema illustrating the  
database structure of the AD module;  
FIG. 30 is a flow diagram illustrating the main program steps for the AD  
25 module; and  
FIG. 31 is a block diagram representing a database schema for a visual effects  
module of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

With reference to FIG. 1, a block diagram illustrating an exemplary system  
30 architecture for the present invention is shown. A server computer 100 acts as a server



component of the present invention, and includes a central processing unit (CPU) 102 for running a system application 104, which processes network transactions and issues common gateway interface (CGI) instructions to a relational database management system (RDBMS) 106.

5           The server 100 is connected to a network 108 which may include the Internet, an intranet, a local area network, a wide area network, or the like. An Internet client 110, an intranet client 112, a kiosk unit 114, or a plurality of other network devices may be connected to the network 108 for accessing the server 100. The network protocol may include the Transmission Control Protocol/Internet Protocol (TCP/IP), the inter-network packet exchange  
10 (IPX), the hypertext markup language (HTML), or a combination thereof, to include a standard network typology described herein. Alternatively or in addition, the kiosk 114 may be directly connected to the server 100 and/or to the network 108.

          In an illustrative embodiment, the server 100 may be an "INTEL PENTIUM"-based server operating, for example, the "MICROSOFT WINDOWS NT" and/or the  
15 "MICROSOFT WINDOWS 2000" operating system, and each of the clients 110-112 and kiosk unit 114 may include an "INTEL PENTIUM"-based system operating, for example, the "MICROSOFT WINDOWS NT" and/or the "MICROSOFT WINDOWS 2000" operating system and/or the "MICROSOFT WINDOWS 95", "MICROSOFT WINDOWS 98" and/or "MICROSOFT WINDOWS 2000" operating system. Alternatively, or in addition, the clients  
20 110-112 and kiosk unit 114 may be a computing system based on the "APPLE MACINTOSH" line of computers, using, for example, "MAC OS 7.6".

          Each of the clients 110-112 and kiosk unit 114 includes a network interface card, such as an "ETHERNET"-compatible card, and may also include, for example, 32 Mb of random access memory (RAM) as well as 50 Mb hard drive-based memory capacity. In  
25 addition, the server 100 and each of the clients 110-112 and the kiosk 114 may include applications programs such as "FILEMAKER PRO VERSION 4" and "ADOBE ACROBAT" for accessing portable document format (PDF) files.

          With reference to FIG. 2, a block diagram representing a system module overview is shown. A department coordinator (DC) module 201, also called the  
30 COLUMBUS DC or "DC" module, is downloaded to the coordinator's client, which may

include one or more of the clients 110, 112 or 114 of FIG. 1. The DC module 201 can be used in any one of the following production departments in a product entity: main production office, construction office, transportation, special effect, post department, etc. Within the DC module 201, a number of production reports can be created, including: Staff & Crew, Staff  
5 Lists, Staff Phone Lists, Staff Pager Lists, Deal Memos, Travel Authorizations, Travel Memos, Travel Schedules, Time Cards, and Labor Logs. The reports comply with typical studio terminology and industrial terms of art. Department coordinators using the DC module 201 may also electronically send any reports generated from their offices to the system in .PDF file format and loaded onto the server 100 to be posted on the network 108 or  
10 website.

An Assistant Director (AD) module 202, also called the COLUMBUS AD or "AD" module, is downloaded to all of the assistant directors' and production coordinators' computers, which may include one or a number of the clients 110, 112 or 114 shown in FIG. 1. The AD module 202 creates call sheets and production reports on standardized forms. The  
15 reports produced by the AD module 202 include Call Sheets and Production Reports, which may be distributed in an ASCII format or in .PDF file format. Other reports such as Schedules, Day of Days, One Liners, 2<sup>nd</sup> Unit Information, and Memos can be sent through other applications, for example, E-mail messaging systems. The reports comply with the studios terminology and industrial terms of art. An assistant director using the AD module  
20 202 may also send any reports generated to the server 100 either in an ASCII format or in .PDF file format, and then loaded onto the server 100 to be posted on the network 108 or website. Alternatively, the common file formats for all reports may be in hypertext markup language (HTML), extensible markup language (XML), standard generalized markup language (SGML), or other standardized file and/or data formats.

25 A Creative module 203 is downloaded to a client, which may include one of the clients 110, 112 or 114 of FIG. 1. The Creative module 203 is used for uploading and saving all Scripts, Scene Changes, Revisions, Cast Lists, Contracts, and Memos, which are saved either in an ASCII format or in .PDF file format. The documents saved in the Creative module 203 comply with studio terminology and industrial terms of art. The documents  
30 saved in the Creative module 203 are electronically sent to the server 100 either in an ASCII

format or in .PDF file format, and loaded onto the server 100 to be posted on the network 108 or website.

An Accounting module 204 is downloaded to a client, which may include one of the clients 110, 112 or 114 of FIG. 1. Using the Accounting module 204, accounting data documents are created and saved to .PDF files for uploading to the server 100. The Accounting module 204 uploads documents for Budgets, Check Registers, Cost Reports, Asset Reports, General Ledgers, Hot Cost Reports, Status Reports, Estimated Final Cost (EFC) Reports, Variances Reports, Petty Cash Logs, Memos, etc. The documents created and saved in the Accounting module 204 comply with the studio terminology and/or generally known accounting principles. The documents saved in the Accounting module 204 are electronically sent to the server 100 either in an ASCII format or in the .PDF file format, and loaded onto the server 100 to be posted on the network 108 or website. Accounting departments working with standard accounting systems, such as "VISTA" accounting systems by "ENTERTAINMENT PARTNERS" of Burbank, California, USA, can generate cost reports that can be saved directly on the "VISTA" system, sent to the server 100 and posted for the most accurate information.

A Visual Effects (VFX) module 205 is downloaded to a special effects department client which may include one of the clients 110, 112 or 114 of FIG. 1. Using the VFX module 205, documents generated within the special effects department are logged, tracked and electronically sent to the server 100 either in the ASCII format or in the .PDF file format, and loaded onto the server 100 to be posted on the network 108 or website. The documents generated by VFX module 205 include: Storyboards, VFX Reports, Purchase Orders, Staff & Crew Reports, Vendor Logs and Labor Logs. The documents created and saved in the VFX module 205 comply with studio terminology and industrial terms of art. The server 100 stores all of the documents sent to it from the modules described herein. The system application 104 shown in FIG. 1 tracks and disseminates all files to the network 108 or website.

A web or network output module 207, such as a browser and/or a graphic user interface (GUI), is provided so that studios, independents, networks, etc. using the system may access the reports produced by the various modules as described herein. Using web

clients, the studios can view documents on the server 100. Password protection keeps outsiders or unauthorized personnel from viewing confidential documents.

With reference to FIG. 3, a flow diagram is shown representing the overall server data flow for the system of the present invention. The system provides a service which  
5 delivers production data directly from a production office anywhere in the world, to the studio executive, network or any offices connected to the Internet and/or World Wide Web (WWW). The server 100 receives data the from Department Coordinator (DC) module 201 in step 300. Data is  
also received from the Assistant Director module 202 in step 301. Data is also received from  
10 the Creative module 203 in step 302. Data is also received from the Accounting module 204 in step 304. Data is also received from the VFX module 205 in step 306. The data is organized by the system application 104 in step 308. The data is then posted in a website content area for display on the website stored on the server 100 in step 310.

All information saved on the server 100 is backed up frequently to avoid  
15 losing files due to system malfunction. The website is password protected to ensure safety and confidentiality.

Three of the modules are specifically designed for the system of the present invention to mirror production protocols: the DC module 201, the AD module 202, and the VFX module 205. Formatted data from each of these modules, apart from the ASCII or .PDF  
20 format files, can be exported from the specific client on which they are each resident, and sent electronically to be uploaded to the server 100. The formatted data is organized and stored into the RDBMS system 106 by the system application 104 after receipt by the server 100. Further, any printable document can be sent to the server 100 and put on-line for studio executives to view.

25 With reference to FIG. 4, an initial opening screen 400 is shown for the DC module 201. The screen 400 includes a set of icons or buttons 402 used for accessing sub-modules within the DC module 201. The sub-modules within the DC module include: Staff & Crew, Deal Memos, Travel Authorizations, Purchase Orders, Daily Labor Tracker and Project Tracker. To access specific sub-modules, the following buttons or icons in the button  
30 set 402 are used: Staff & Crew button 404, Deal Memos button 406, Travel Authorizations

button 408, Purchase Orders button 410, Daily Labor Tracker button 412, and Project Tracker button 414.

With reference to FIG. 5, a screen 500 is shown which appears when the Staff & Crew sub-module is accessed. A button set 502 includes utility buttons or icons used to  
5 manipulate information relating to staff and crew members within a production department. The Staff & Crew sub-module organizes and maintains an up-to-date log of all the Staff and Crew within a department, making it easier to track employees and generate reports pertaining to them. The Staff & Crew sub-module and/or its associated Staff & Crew screen 500 is generally the first component to be accessed in the DC module 201. To generate a  
10 record, a Staff & Crew button 504 is clicked. A New button 506 may be clicked, to prompt the system to create a new record. The user may check that the person or information which the user is about to enter is not in the system already by clicking on a list button 508 to view a list to see if that person is listed. If he or she is not listed, the user may return to the main record and continue to enter the person's information in the available fields shown on the  
15 screen 500. If he or she is already listed, the user may click on the list record to display the full record.

Several fields, such as Department and Job Category, display a pop-up list of available entries. The user may select from the available list or scroll down the list and click an "edit..." option at the bottom of such lists and add or change from the available list. The  
20 user may put the new entry where the user wants it in the list or it may appear at the bottom of the list. Some lists may be empty. The empty lists self-generate; that is, as the user enters new records, the system builds a list from the empty lists based on the records in the database. Marking a person confidential in the address and phone fields keeps that information off Staff and Crew lists.

25 The user may tab or click through the fields and enter the individual's information in the related fields until finished. The Staff & Crew information entered is accessed by other sub-modules such as Deals and Travel sub-modules.

In the system and method of the present invention, a person's information in the Staff & Crew sub-module is entered by the user before using any other sub-modules such  
30 as Deals, Travel, Time Cards, etc.

A Sort # field is provided to allow the user to sort the names in the Staff & Crew list in ascending order e.g. the producers are listed first, script writers second, etc. No number is required to be entered if the user chooses to have the person listed alphabetically within the department. If the user chooses to have a producer and his/her assistant displayed  
5 in the first and second positions within their department heading, the user may put a "1" in the producer's record and a "2" in the assistant's record.

In the Miscellaneous (Misc.) Information Field, the user can enter information regarding where a crewmember working and any security levels which they are designated. The user may mark a crewmember as either a Staff or Temp, depending on their status.  
10 When a Staff member is no longer working on a show but the user doesn't want to delete their information, the user may mark them as having a historical or inactive status.

When the user has completed entry of all the information in the Staff & Crew sub-module, the user can create a Deal Memo or Travel Authorization within a DEALS TO DATE window 510 or a TRAVEL window 512. The user may click one of two new buttons  
15 514-516 displayed, for example, above the DEALS TO DATE window 510 or the TRAVEL window 512.

When a new Deal Memo or Travel Authorization record is created, the person's vital information already appears, such as the person's name, address, telephone numbers, etc., and the user is merely required to fill in the blank fields. The DEALS TO  
20 DATE and TRAVEL windows on the screen 500 also allow the user to view all the previous Deals and Travel information created for a selected person.

With reference to FIG. 6, an exemplary screen 600 is shown which is used for printing Staff & Crew sub-module reports. The screen 600 provides the user with many printing options for generating reports. Several different report types may be printed from the  
25 screen 600, including a Staff & Crew main report, Staff & Crew with Temp report, Staff & Crew Temp Only report, and a Staff & Crew Department Report. Other reports include a Pager List, Identification (ID) Badge List, Credits Report, a General Report and a Labor Sign In report.

Once the user chooses the report to be generated, the user may click a Report  
30 button next to a displayed icon corresponding to and representing the report type. For

example, if the user would like to print the Staff & Crew main report, the user may click the button 602. If the user requires information to be printed at the top of a report, the user may enter such information in the Header Info field 604.

Using the screen 600, the user may print a list for a specific Department of the  
5 Staff & Crew. The user may click the Department field 606, and a pull-down list of Departments appears. The user may select the Department for which to generate and to print the report, and then click the button 608 to print the report. The user may return to the Staff & Crew screen 500 shown in FIG. 5 without printing any documents by clicking a Staff button 610 shown in FIG. 6. Once the user has completed Staff & Crew entry, the user may  
10 go back to the screen 400 of FIG. 4 by clicking a World button 518 in FIG. 5.

With reference to FIG. 7, an exemplary Deal Memo screen is displayed after a user clicks the Deal Memo button on the screen 400 of FIG. 4. Once the user has entered the crew members' information in the Staff & Crew sub-module, the user can then make a deal memo for such crew members. The user creates a new Deal by clicking on a New button  
15 702. An employee field then opens and allow the user to choose from a list of staff and crewmembers. The user may scroll through the list and select a specific person using a pull-down menu. An example of the information from the Staff & Crew database is shown on the screen 700. The user may enter all information for describing a deal in fields in a Deal window area 704 in the screen 700.

20 When the user has finished entering information in the fields, the user may use the tab key or mouse to scroll to the top of the Deal window 704. At the top-right of the window, for example, the user may click an unhappy-face button, which is replaced or modified to become a happy-face button 706 after completing the deal.

In cases in which a crewmember has been promoted or has switched jobs, an  
25 additional deal memo can be created for him or her. In the DEALS window, the user may find the specific person and simply click the New button 702. The user may thus enter in the information, and a second deal memo is created.

To change information in a deal memo, the user first returns to the Staff & Crew module by opening the Staff & Crew screen 500 of FIG. 5. The user finds the record to  
30 change on the screen 500. Once the record is located, the user may make any changes either

using the screen 500, or by going to the DEALS TO DATE window 510 and clicking an Arrow button 520 next to the Deal record which the user wants to change. Alternatively, when a user is changing a name or a social security number (SSN), the system may require the user to find the old name or SSN, access and pull up such information on the screen, and  
5 make and save such changes. The user may make any more changes necessary. The DEAL DATE field automatically provides the current date.

The user may make changes to a Deal Memo straight from the screen 700 by clicking on the List View button 710. A list of crewmembers are presented, and the user may find the crewmember for the Deal which the user chooses to change by clicking an Arrow  
10 button next to the crew member to get to the corresponding record. Once in the selected crewmember's deal record, the user may make any changes necessary and the selected deal record is linked to Staff & Crew sub-module.

With reference to FIG. 8, a screen 800 is shown which allows a user to print a Deal Memo. From the screen 700 of FIG. 7, a user may click a Print Deal Memo button 712  
15 to have the screen 800 generated and displayed. If the user wants to print a deal package, the user may click on a combination-form button, such as the button 802. To get individual pages of a deal memo, the user may click on a list button next to any combination form button, such as the button 804. Alternatively, an Auto Deal package may automatically choose the type of deal in which the crew member fits; for example, the Directors Guide of  
20 America (DGA), a specific union, or a non-union entity or type, and then the generated package is printed. Many other reports can be printed for a department coordinator or a user to use when researching staff deals.

With reference to FIG. 9, a block diagram is shown illustrating the steps for exporting formatted data from the DC module 201 to the server 100. Although the steps for  
25 exporting Staff & Crew data and Deal data are shown in FIG. 9, any data entered in each sub-module may be exported to the server 100 using known data export methods. The following steps are followed to export Staff & Crew and Deal data:

- open the Staff & Crew screen 500 in step 900;
- access a system Script pull-down menu, and select EXPORT STAFF &  
30 CREW from the script menu in step 902;



system creates a backup file called STAFF.EXPORT in step 904;  
open the Deals screen 700 in step 906;  
access a Script pull-down menu and select EXPORT DEALS from the  
pull-down menu in step 908;  
5 the system creates a backup file called DEALS.EXPORT in step 910;  
the user opens an Internet mail account access system, such as the  
"MICROSOFT NETWORK" service of "MICROSOFT" of Redmond, Washington, U.S.A.,  
or the "AMERICA ON-LINE" service of "AMERICA ON-LINE" of Vienna, Virginia,  
U.S.A., in step 912; and  
10 through the Internet mail account access system, the user forwards the files  
STAFF.EXPORT and DEALS.EXPORT to the server 100 in step 914, which may then be  
saved in a back-up folder of the DC module 201.

In example embodiments of the invention, the user may be required to input,  
in the subject line of the E-mail, a TV show name, for example "X-Files", to which the data  
15 pertains. The server application 104 shown in FIG. 1 may use the input TV show name as a  
reference for adding records to the RDBMS 106. However, in other embodiments, the DC  
module 201 and other modules may provide a show index embedded in the export files which  
can be matched with the show index in RDBMS 106 for a properties update of the RDBMS  
106.

20 With reference to FIG. 10, a screen 1000 is shown for creating travel  
authorizations. To access the Travel Authorization sub-module, the user clicks the Travel  
Button on the screen 400 shown in FIG. 4. Once in the Travel Authorization sub-module, the  
screen 1000 is displayed, and the user may click a new-Travel-Authorization button 1002.  
Using a mouse, the user then clicks a Traveler field 1004 to select a person in a pull-down  
25 menu. The user may then enter information in the fields and any input expenses or costs are  
calculated automatically to determine a total travel expense to be authorized.

The user may print a travel authorization report or form. From the screen  
1000 shown in FIG. 10, the user may click a Print Button 1006 in order to prompt the system  
to display the screen 1100 in FIG. 11. The user may select the travel information to print,  
30 which may include selecting a specific time table for certain reports, e.g. the Movement

Report, Movement Report All Info, or the Flight Report by typing in dates in the fields 1102-1112.

With reference to FIG. 12, an exemplary Purchase Order screen 1200 is shown for creating a purchase order (PO). On the screen 400 of FIG. 4, the user may click the  
5 Purchase Order button to display the PO screen 1200. In the PO screen 1200, the user may click a New PO button 1202 to create a new purchase order. The user may enter information in the displayed fields on the screen 1200. In an ITEM DESCRIPTION window 1204, a user may provide detailed information about the purchase order. In order to do so, the user clicks an Arrow button 1206 for a detail line. There is also a Notes field for the entry of additional  
10 information. The COMPARE button 1208 allows the user to compare the item with another item in the database e.g. wood at \$250.00 from one company and wood at \$350.00 from another company. The user clicks the Compare button 1208 with the mouse to activate the compare feature.

Under the DEPARTMENT column, there are several fields, such as  
15 Department field, a pull-down field that allows the user to select a type of expense and an account field. The tab key or mouse is used to activate the individual fields. In a Tax Rate field, the user may enter the appropriate tax rate for the area e.g. 8.25% for Los Angeles.

When the user is finished entering the information on the screen 1200, the user may go to the top of the screen where the user may define the purchase order by clicking a  
20 pull-down menu, for example, at a top-right portion of the screen. The user may choose if the PO is for a purchase or rental, or alternatively through the Studio Track Number (STN) service of FOX studios.

With reference to FIG. 13, an exemplary screen 1300 is shown for printing purchase orders. In the screen 1300, the user may select a PO or PO report to print by  
25 clicking the corresponding buttons 1302, 1304 according to the corresponding indicia or text 1306, 1308, respectively, indicating which report is printed by which button or icon. The user may print a specific PO record. For example, the user may find the individual department report by clicking in a DEPARTMENT field; after which, a pull-down list appears. The user may then select the department to print, and then click the proper button to

print that report. The user may select a specific timetable for PO List Report by typing in dates in date range fields.

With reference to FIG. 14, an exemplary Daily Labor Sheet 1400 is shown.

Typically, the Daily Labor Sheet sub-module is used for departments in which crew hours are  
5 logged within the department creating a new record. The user begins by entering all the data in the available fields beginning with the date. Entries include call time, meal times, wrap, pay hours and rate. The user may choose, through a unit pull-down menu 1402, to which unit a crew is assigned, with a default unit being first Unit. The user may enter crewmembers from a name-field pull-down menu which displays names of crew entered in the Staff & Crew  
10 sub-module. Once a name is selected, the person's rates is automatically selected from the information entered. To enter a crew or an individual crewmember on a different pay scale, the user may change the total in the rate field, then select the crewmembers in the name field.

With reference to FIG. 15, an exemplary Labor Report screen 1500 is shown.

To print a Labor report, the user selects a desired report according to the indicia or text 1502,  
15 and then clicks the list button 1504 next to the selected report. The date fields allow the user to enter a specific date or person/week.

With reference to FIG. 16, an exemplary Project Tracker screen 1600 is shown, which can be used to track purchases and labor costs on a particular show or set. The user may click a New button 1602 to create a project sheet. The user may enter a project ID  
20 number in the ID# field in a PROJECT INFO section 1604. The user uses this ID number on all PO's, rentals, and time cards. Those figures are automatically transferred into the new document. The user may continue to fill out Project Tracker information in a PROJECT INFO section by entering information in the following fields: Project Description, Category, Set Scenes, Notes, Budget Amount, Estimated Final Cost, EFC Variance, Start Date and Due  
25 Date. The Category and Set fields become pop-up lists as the user enters information into them. By clicking on an Arrow button or icon 1606, a user can view a particular PO, or view Rental or Labor information. The Purchases-to-Date, Rentals-to-Date, Labor-to-Date, and Cost-to-Date are automatically transferred when a user enters their ID number.

With reference to FIG. 17, an exemplary Projects Reports screen 1700 is shown. To print a Projects report, the user selects a report to print from the indicia or text 1702, and clicks the corresponding list button 1704 next to the selected report.

With reference to FIG. 18, a set of buttons are shown which have universal application from screen to screen throughout the system of the present invention. For example, when viewing reports, the buttons may have the following contextual meanings: the user may click a List View button 1800 to list all reports; a user may go to a certain report by clicking an arrow button 1802 next to the report button or icon; or a user can sort reports by clicking on the sort button 1804.

10 A user may search for a report by clicking a find button 1806 to Find a record. The user may click the arrow button 1802 which appears next to a report, and the system generates and output that report.

To delete a Production Report or Call Sheet the user first opens the report, and clicks a Delete button 1808. A window appears, prompting the user to confirm deletion  
15 before deleting the report. Toggle buttons 1810 are provided throughout to toggle between records.

With reference to FIG. 19, a block diagram is shown illustrating database schema of the DC module 201. Duplicate databases for DC module 201 are stored on the client-and-server portion of the system. The client updates the server database using the  
20 process described with reference to FIG. 9. Each of the tables 1901-1910 may include at least a number entry, such as a reference or key number for each entry in the tables 1901-1910. In addition, some tables may include names, identification (ID) numbers, dates, etc.

A preference table 1901 is provided in which all data is entered and stored that pertains to a TV show or feature. The general default settings are input into the table 1901,  
25 such as the show name, production name and address, and PO starting number.

A POC.fp3 table 1902 is used as the map for DC module 201. Once the DC module 201 is opened, the POC.fp3 table 1902, or alternatively, an alias icon renamed, for example, "COLUMBUS DC", sits or is located on the client desktop for access by the screens and forms described herein. Staff and crew information, deal memos, travel authorizations,

travel memos, schedules, time cards, purchase orders, labor logs, and various crew lists are accessed by clicking the corresponding buttons on a form.

A Staff and Crew table 1903 is provided in which all staff and crew members' vital information is logged in the database. Addresses, phone numbers, job titles, and other  
5 Staff and Crew data are stored in the table 1903. Once logged, staff and crew phone lists, pager lists, address lists, and other Staff and Crew data can be printed. The entire table 1903 can be exported and sent to the server 100 to be posted to a studio website.

A Deals table 1904 is used to store Deal information entered into the system. By connecting to the Staff and Crew database, a user can input deal information such as  
10 salary, rentals, etc. for each crew member, and can generate deal memos for a specific crew member. The table 1904 stores current and previous salaries of each crew member. Deal information from the table 1904 can also be exported and sent to the server 100 to be uploaded to a studio website.

A Travel table 1905 stores travel information. In a manner similar to the user  
15 of the Deal Memos, a user can use the Staff and Crew database to create travel information for crew members as described herein. Authorization forms, travel memos, flight schedules and travel movement reports can all be printed from the information stored in the table 1905.

A Labor Log table 1906 stores labor log information. As described herein, the information stored in the table 1906 is used to track daily time card information, including  
20 who has worked on sets or projects. Daily rates may be calculated according to union standards.

A Labor Line table 1907 stores line entries for the Labor Log table 1906, while a Project Track table 1908 stores accounts which can be set up for each project which the user chooses to track. The table 1908 is a free form file that can be used for storing data  
25 representing individuals, set, effects, or anything the user chooses to record. All projects are assigned a number and labor or purchase orders can be tracked, and such numbers are stored in the table 1908.

A PO table 1909 stores Purchase Order information in order to track all purchases within departments. Once POs are input into the system, the POs are logged and  
30 stored in the table 1909, and such store POs can be referred to repeatedly and used by a

project tracker. All vendors names and information are stored and can be displayed in a pull-down menu bar allowing the user to input PO information once, and thence to use such PO information continually. POs can be sorted and printed by department, vendor, or number using the data in the table 1909. PO numbers can be generated freely or can be assigned  
5 default values in the table 1909 during entry. A PO Line table 1910 stores PO line data by the number assigned to the purchase order so the line items can be tracked and assigned to other projects for billing purposes.

With reference to FIG. 20, a flowchart is shown illustrating the process of setting up and using the DC module 201 described herein. First, the DC module 201 is  
10 downloaded and installed on the client computer of a department coordinator in step 2000. A network connection with the server 100 is set up so that the system may be shared or viewed by others authorized to use the system in step 2002. The preference files are then set up in step 2004. Once installed, the DC module 201 allows the department coordinator to process, in step 2006, Staff and Crew information, Deal Memos, Travel documentation, Purchase  
15 Orders, Time Cards and Track Projects as described herein.

With reference to FIG. 21, an initial opening screen 2100 is shown for the AD module 202. The screen 2100 includes a set of icons or buttons 2102 used for accessing sub-modules within the AD module 202. The sub-modules within the AD module 202 include modules for coordinating and inputting Preferences, Cast List, Settings, Call Sheets and  
20 Production Reports. The following buttons in the button set 2102 are used to access specific sub-modules: a Call Sheets button 2104, a Production Reports 2106 button, a Settings button 2108, a Cast List button 2110, and a Preferences button 2112.

With reference to FIG. 22, an initial first page of a Preferences screen 2200 is shown which appears after clicking the Preferences button 2112. After downloading the AD  
25 module 202 from the server 100, the user uses the Preference sub-module as a first step in a set-up procedure. The preference file is used in the AD module 202. By logging show information in the preference file using the fields 2202 of the screen 2200, the entered data is stored in a preference table and used as default data every time the user opens a new report.

FIG. 23 shows a second page 2300 of the Preferences screen 2200 of FIG. 22.  
30 Scrolling down in the Preference screen 2200, the user sees the Call Sheet default settings.

shown in FIG. 23, which allows the user to specific and generate a master list of all crew members. The user may enter each crew member's name, position and call times. An All button 2302 and an Add/Subtract button 2304 at the top allow the user to make a standard call time for the entire crew. Add/Subtract button boxes 2306 at the top of each column allow the user to change the call time for that column. The user can also change an individual time by clicking into the time box such as the box 2308 next to the crew member's name. The On Call (O/C) boxes are provided to specify crew members who are on call. If the user checks that box, the O/C notation appears on a corresponding call sheet of a specified crew member instead of listing a time entry. Once the user has filled out the preference section, the user may go back to the AD screen 2100 of FIG. 21 by clicking a World button 2204 in FIG. 22.

With reference to FIG. 24, a Cast List screen 2400 for the Cast List sub-module is shown. Cast members can be logged and tracked on the screen 2400. To get to the screen 2400, the user clicks the Cast List button on the screen 2100 of FIG. 21. To create a cast list, the user clicks on a New button 2402 which causes a blank record window to be displayed to receive the cast member's name, production number and the character name. The user may enter the entire cast in this section. The user may also put in call times and remarks about each character to set as a default for the Call Sheets and Production Reports. Activation or clicking of a sort button 1804 shown in FIG. 18, which may also be displayed on the screen 2400 of FIG. 24, causes the system sort a cast list in numerical and/or alphanumerical order. The user may click a delete button 2404, if the user chooses to delete an actor from the roster.

When the user has completed the cast list, the user may click on the world button 2406 before inputting a scene list. The user can add or modify cast members at any time during a shoot.

With reference to FIG. 25, an exemplary Scene List screen 2500 is shown. The AD module creates scene lists by importing the information directly from the "MOVIE MAGIC SCHEDULING" system, of "SCREENPLAY SYSTEMS" of Burbank, California, U.S.A., and such information importing can save on time and errors. If the user works with the "MOVIE MAGIC SCHEDULING" system, the user may follow the steps described herein for exporting scenes. If the user does not use "MOVIE MAGIC SCHEDULING", the

user can create scene lists by first clicking on the scenes button on the screen 2100 of FIG.

21. The user may then click a New button 2502 and enter all the information pertaining to new scenes in the available fields. Each scene entry also has a list of the cast displayed next to the respective scene entry so the user can choose which cast members belong in each

- 5 scene. The user can track the status of each scene by marking a box on the right side of the scene field. As the scenes are marked, such marked scenes are stored so that any user on the network can later view the progress for a scene as part of the tracking selections in a progress tracking list box 2504. The user can also add or modify scenes at any time during a shoot. The user may click on a World button 2506 before going into a specific call sheet.

- 10 With reference to FIG. 26, a flow diagram is shown for importing data from the "MOVIE MAGIC SCHEDULING SYSTEM". The user may follow the steps below to export information from "MOVIE MAGIC SCHEDULING" to the AD module 202:

open MOVIE MAGIC SCHEDULING in step 2602;

go to the File/ Export menu selection of MOVIE MAGIC SCHEDULING

- 15 in step 2604;

save the export document as a text file in step 2606;

close MOVIE MAGIC SCHEDULING in step 2608;

open export document in a word processor in step 2610;

use global replace command to replace all paragraph marks with tabs in

- 20 step 2612;

use global replace to replace page breaks with paragraph marks in step

2614;

keep cursor in place and press the tab button once in step 2616;

save the export document in step 2618;

- 25 open the AD module 202 in step 2620;

click the Scenes button on the screen 2100 shown in FIG. 21 in step 2622;

go to File/Import in step 2624; and

import the saved export document file to automatically transfer all information in step 2626.



With reference to FIG. 27, a flow diagram is shown illustrating the steps for creating a call sheet with the system. Once the user has set up the Preferences, Cast List and Scene Lists the user can create Call Sheets. First, the user clicks the Call Sheet button on the screen 2100 in FIG. 21 in step 2702. Next, the user clicks in step 2704 a New call sheet button which appears on the client screen. The current date appears in a date field, and the current date can be modified by the user. The user may enter the day-of-days info in a box provided on the screen 2100 in step 2706. The default information is automatically inserted into the day and days info box from the preference table previously configured as described herein.

10 The user next chooses the scenes for a call sheet in step 2708. The scenes chosen for the day in a Scenes pull-down menu appear on the screen 2100 which displays a list of scenes. Once selected, Set Description, and Cast and page number fields are automatically entered from the information previously provided in the Scene List sub-module as described herein. The user enters any appropriate location information in location fields on screen. Clicking on a Scenes button on the screen 2100 causes the system to modify the screen 2100 to allow the user to view the entire scene list.

Next, the user lists the cast for the call sheet in step 2710. The user enters cast members by choosing their numbers from the cast pull-down bar in a number field which is displayed on the screen 2100. The user enters into a Status field the status of each cast member. Call times may be entered from the default list set in the Preferences table described herein, or may be selected by using Time buttons appearing on screen, or may be selected by entering the time in related fields. The cast list can be viewed by clicking on a Cast button. The user may enter Atmosphere/Extras information and Special Notes in the related fields on screen.

25 Next, the user completes an Advance Schedule in step 2712 by choosing the scenes for the upcoming days from a pull-down menu, and related information are automatically entered for the user. Date and location information is also entered in this step.

Next, the user may enter/edit the Crew List data entered in the screen 2300 of FIG. 23 in step 2714, as described herein. The user has the opportunity to review or amend anything on the crew list. Call times and crew can be changed. If the user wants to change

everyone's call time, the user may click an All button on the screen, and enter the new time in a related field. To move a call time up or down sequentially, the user may use Add/Subtract buttons appearing on screen. If a crew member is on call, the user may select an O/C button next to the time field, and the O/C notation appears on the call sheet.

5               Next, the user may export the Call Sheet to a disk in step 2716 so that the Call sheet may be sent to another assistant director for creating a Production Report. When a Call sheet is completed, it can be printed for production use in step 2718. In addition, when a Call sheet is completed and ready to go to the next assistant director, who creates the Production Report for the following day, the user may click an Export Day button, and the document is  
10 saved to the AD module client desktop. The user then may either copy the file onto a disk and give it to the next person directly, who makes any changes or use it as a reference for the Production Report.

              The particular assistant director who is required to produce the Production Report may receive a file storing the call sheet by E-mail or on a disk. Once the file is  
15 received, the assistant director may click on an Import Day button in the AD module 202, and the information is imported into the local client database so the user can make any changes to the Call Sheet.

              With reference to FIG. 28, a set of screen elements for use with the AD module 202 are shown for creating a production report. These elements may either be  
20 compiled as well as displayed on the screen at the same time, or may include a series of separate screens. After the Call Sheet has been completed, a user can then create the Production Report. Depending on the number of assistant directors on a show, and who does what jobs, there are a number of ways to create a Production Report. The user first clicks the Production Report button shown on screen 2100 of FIG. 21. Next, the user selects the day of  
25 the report by clicking on a button 2802 which appears on screen, for example, with a red appearance. A pull-down menu 2804 appears. The user chooses the day to make a report from the pull-down menu 2804. Information is automatically inserted in a Production Report table. The user may view and adjust a current report on the screen accordingly.

              If the user receives exported information from another source, the user may  
30 import that information by clicking on an Import Day button located, for example, midway

down on a Production Report screen. Next, the user enters the day's Actual times in the related fields. By clicking on a Log button 2806, production totals are entered into the local database and stored for the next days Production Report. This button 2806 is used to log times, and other buttons are available to enter or import other information, such as Film  
5 totals.

One aspect of the Production Report sub-module is the ability to track and log the script totals as a TV show progresses. On a Production Report, the user may view a Script Logging section 2808. The user may enter the information in the blank boxes shown. The Production Report sub-module then generates and maintains calculations of production  
10 totals in the box beside it. The user enters the totals in the Script log on the first day. If totals change during the shoot, adjustments are made in the Script log on the first production day's report. As such totals are adjusted, the totals in the related fields are recalculated and adjusted as well. The user may input the day's totals in the available fields on each daily Production Report.

15 A Film Logging section 2810 operates in a similar manner to script logging, allowing the user to keep running totals of aspects of the film used during a shoot. The user may choose the film stock for the day in a pull-down menu and enter the total film used that day as well as any film received. The user may hit a Log button to send the entered information to the database. Clicking on a Film button 2812 on a Production Report window  
20 accesses a Film Logging section 2810, for use by the user, for example, to make any adjustments. This information can also be imported or exported to other assistant director clients, or to the production office to insure that everyone involved in a production has the same totals. Clicking on a World button 1214 returns the user back to viewing the Production Report.

25 Cast and crew lists are imported from the Call Sheet when the user selects a new day. Any adjustments can be made directly in the fields. There is also additional space below the crew list to input any special notes pertaining to a particular day.

When a Production Report is completed and ready to go to the next assistant director, who makes any additional changes before the Production Report is distributed, the  
30 user clicks on an Export Day button and the document is saved to the desktop screen of the

user's computer. The user copies that file onto a disk or sends the file by E-mail to be forwarded to the next assistant director who makes any changes or to use the Production Report as a reference.

If the assistant director receives a disk with the exported Production Report,  
5 the user inserts the disk into the AD client, and opens up or otherwise accesses the AD module 202 to generate and/or display Production Reports. The user then clicks on an Import Day button. The information is imported into the local client database system so the user can make any changes to the Production Report.

Print buttons appear at the top of Call Sheets and Production Reports. The  
10 user may select the pages to print. For example, the user may click a "PRINT 1" button to print the front page, and click a "PRINT 2" button to print a back page. When the user is printing both pages or chooses to send the reports to a studio, the user may use the Print both button. The user may then go to a File/Print menu selection to print a record.

Before a user can send file, for the studios to view, the user first save such files  
15 as ASCII or PDF files. If the user is sending files, to create a PDF file, the user first clicks on the print button. A PDF file of the report is generated and the system prompts the user to indicate where to save the generated PDF file. The user may save the PDF file on the client desktop so the user knows where the PDF file is located when the user chooses to attach the PDF file to an E-mail. The user selects a printer option, such as PDF Writer, and the report is  
20 saved in both the client desktop and a selected file location. To send the PDF files, in one embodiment, the user opens up an E-mail account system and sends the report files as an attachment to an E-mail.

The user may view current reports. The user opens a report window and clicks  
a List View button. A list of all reports is then displayed. The user can access to a certain  
25 report by clicking an arrow button next to the displayed report, or can sort reports by clicking on a Sort button. The user may also search for a report. From a report window, the user clicks a Find button to find a particular report. The user clicks an arrow button next to the particular report, and the report is displayed and/or presented to the user. The user may also delete a Production Report or Call Sheet. The user finds the report to delete, and clicks a  
30 Delete button. The system confirms deletion with the user, and then the report is erased.

With reference to FIG. 29, a database schema is shown illustrating the database structure of the AD module 202. A table 2901, which may be labeled ADPref.FP3, stores all data entered when the user is setting up a new feature, episode, etc. Data entered in this manner is the default data that is uploaded to each new call sheet and production report.

5 An AD.FP3 table 2902 works as the map for the AD module 202. Once the module is opened, a form of the AD.FP3 table 2902, or alternatively an alias icon named "COLUMBUS AD", is located on the desktop and allows the user to access call sheets, production reports, cast lists, scene lists, and the preference file by clicking corresponding buttons. Server phone numbers and E-mail addresses are also available by clicking a World  
10 button on the resident form.

A Call Sheet table 2903 includes notification data to inform all crew members what scenes are to be shot the following day. Instructions regarding sets, costumes, props, call times, and scenes being shot are also included on the call sheets.

A Production Report table 2904 serves as reference for all departments to track  
15 what was shot on a particular day. A production report includes film logs, scene logs, cast used, call times, out times, and injuries or changes on that particular day.

A Cast.FP3 table 2905 stores all information regarding the cast for the production of a show. Data can be changed, added or adjusted throughout using any of the forms as described herein. The cast list created and stored in this file is the default list used  
20 for Call Sheets and Production Reports.

A Scenes.FP3 table 2906 stores all information regarding the scene lists for the production of a show. Data can be changed, added or adjusted throughout using an associated form as described herein. Information imported from the MOVIE MAGIC BUDGETING system enables global preferences to be set. The scenes list created using this table is the  
25 default list used for Call Sheets and Production Reports.

With reference to FIG. 30, a flow diagram is shown representing the main program steps for the AD module 202. The assistant director produces all call sheets and production reports from this module. First the AD module 202 is downloaded from the server 100 and installed on the assistant director's client computer as well as a production  
30 office coordinators desktop client in step 3000. The AD module 202 is networked to the

server 100 in step 3002. To begin use, the assistant director accesses the preference screen, described herein, and fill out all the necessary information for defining preferences for the AD module 202 in step 3004. Crew information and call times are also set using the preference screen. This information is saved in a default setting table for all call sheets  
5 generated and stored thereafter.

The assistant director may then create a cast list in step 3006. By clicking on a Cast List button, the assistant director is provided a new input field displayed on the screen. The assistant director may then click a New button to add all cast members. The assistant director can also set any defaults regarding call times or notes. For episodic television and/or  
10 a TV series, the file storing the cast list may be changed frequently to list new and guest actors.

Next the assistant director may enter scene lists in step 3008, either manually or by exporting scene information from the MOVIE MAGIC SCHEDULING system. These scene lists can be added or changed at any time during the run of production. For episodic  
15 television, the scene list may be changed from show to show.

After the settings have been input, an assistant director is ready to create a call sheet in step 3010. By clicking on a Call Sheet button the call sheet screen is displayed as described herein. The assistant director may then click the new button and a new call sheet record is created. By entering the date and day-of-days, all the information from the  
20 preference file is imported onto the call sheet. The scenes for the day's shooting schedule can be chosen by clicking a first scenes box, which is a pull-down menu displaying all of the scene numbers previously input in the scenes field. Once a scene is selected, all information pertaining to that scene is imported onto the call sheet. The cast list may be used in the same manner.

25 Nearly all the fields on the call sheet are adjustable, thus giving the assistant director the option to manually change or insert any information. Once the call sheet is completed, it can be printed for distribution within production and exported to the server 100 to be put on the studio website in step 3012.

Production Reports, as described herein, are the reports that document work  
30 from the previous day. The assistant director generates production reports using the

information that was input on the call sheet for that day in step 3014. By clicking on the new button in the Production Report file, a new document appears. The assistant director inputs the shoot day and shoot date information, and information from the preference file is imported onto the production report. The assistant director then enters the information in the open fields relating to the day's work. Like the call sheet sub-system, pull-down menu bars appear in the scene section and cast section. By clicking the log buttons, the information is stored and calculated for upcoming production reports. The film log section keeps track of the amount of film used, as well as script and cast lists, and can be accessed by clicking the film button next to that section. As with Crew Lists, all the fields are modifiable. Once the production report is completed, it can be printed for distribution within the production team, and exported to the server 100 to be displayed at the studio website in step 3016. Periodically, data entered into the AD module 202 is sent to the server 100 in step 3018.

With reference to FIG. 31, a block diagram is shown representing a database schema for the VFX module 205, which has the same capabilities as the DC module 201 described herein, but with enhanced modules that allow the VFX producer or supervisor to track shots, elements, storyboards, vendors, costs, and more. The VFX module 205 is specifically designed for use by the visual effects supervisor or producer on a feature film, to enable such visual effects people to track multiple shots, elements, and storyboards, as well as allowing the detailed tracking of visual effects vendors.

A preference table 3101 stores all data entered that pertains to a TV show. The general default settings are input into the table 3101 through a preference entry screen to specify selected settings, such as show name, production name and address, PO starting number, etc.

A VFX.FP3 table 3102 is used as a map for the VFX module 205. Once the VFX module 205 is opened, the VFX.FP3 table 3102 and an associated form is displayed, or alternatively an alias icon named "COLUMBUS VFX", sits on the desktop and allows the user to access and input staff and crew information, deal memos, travel authorizations, travel memos, schedules, time cards, purchase orders, labor logs, and various crew lists by clicking buttons that pertain to them.

A Main table 3103 is a control table which stores data for controlling the viewing of all records in the VFX module 205.

A sequence table 3104 stores sequence data for providing the user with the ability to view an actual special effect sequence, with individual film shots of the sequence  
5 being viewable for explaining shots and elements of a special effect.

A VFX Shot table 3105 stores data for generating shots on screen which are included in each sequence.

A VFX Element table 3106 is a table related to the table 3105 for storing data corresponding to individual elements for each shot.

10 A Storyboard table 3107 stores data for the images of shots. Each storyboard is assigned an image or a shot.

A Purchase Orders table 3108 stores data used to track all purchases within departments. Once such data is input into the system, the purchases are logged and stored in this table. The purchases can be referred to again and used in the project tracker. All vendor  
15 names and information are stored and are displayable using a pull-down menu bar allowing the user to input such information once and to use such information continually. POs can be sorted and printed by department, vendor, or number if need be. PO numbers can be generated freely or defaulted to assigned numbers.

A PO Line table 3109 stores the numbers assigned to purchase orders so, using  
20 the number, the POs may be tracked and assigned for billing purposes.

A Contracts table 3110 stores vendor information for vendors that work on all elements. The Contracts table 3110 may be used as a reference for phone numbers, addresses and contracts.

A Staff & Crew table 3111 stores all staff and crew member information, such  
25 as address, phone numbers, job titles, etc. Once logged, staff and crew phone lists, pager lists, address lists, etc. can be printed. As with all tables in all client modules, this table 3111 can be exported and sent to the server 100.

A Labor table 3112 stores information for tracking daily time card information including who has worked on sets or projects. The Labor table 3112 is used to calculate daily  
30 rates according to union standards. Labor can be tracked according to elements assigned.



It will thus be seen that the aforesaid objects, among those made apparent from the preceding description, are provided and changes may be made in carrying out the disclosed system and method and in the construction set forth without departing from the spirit and scope of the invention. For example, any known aspect of film and TV show  
5 production may be monitored and managing, such as the audio effects of a production including music soundtracks and audio special effects, as well as legal aspects of production, such as copyright and trademark tracking and clearance, and, additionally, product placement issues and intellectual property releases and contractual obligations. Accordingly, it is intended that any and all matter included in the disclosed description and shown in the  
10 accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

WHAT IS CLAIMED IS:

1. A computerized system for managing a film and/or show production, the computerized system comprising:
  - a server operatively connected to a first network;
  - 5 a client operatively connected to the first network and to the server through the first network, wherein the client includes:
    - a department coordinator module for allowing entry of department coordinator data for a production and for transmitting the entered department coordinator data to the server; and
    - 10 an assistant director module for allowing entry of assistant director data for the production and for transmitting the entered assistant director data to the server; and
    - a graphic user interface accessible by a user for selectively presenting to the user the received data, including the department coordinator data and the assistant director data, received by the first network.
- 15 2. The computerized system of claim 1, further comprising:
  - a creative module for allowing entry of creative data, including scripts and cast lists, and for transmitting the entered creative data to the server.
3. The computerized system of claim 1, further comprising:
  - an accounting module for allowing entry of accounting data and for
  - 20 transmitting the entered accounting data to the server.
4. The computerized system of claim 1, further comprising:
  - a visual effects module for allowing entry of visual effects data and for transmitting the entered visual effects data to the server.
5. The computerized system of claim 1, wherein the server provides such
- 25 received data through the first network to the user using the graphic user interface.
6. The computerized system of claim 5, wherein the first network is the Internet.
7. The computerized system of claim 5, wherein the first network is an intranet.

8. The computerized system of claim 5, wherein the first network is a studio-based network.

9. The computerized system of claim 5, wherein the first network provides the received data through the first network and through the graphic user interface to one of the  
5 group of a studio, an independent entity, and a second network.

10. The computerized system of claim 1, wherein the received data from the department coordinator module and the assistance director module is formatted in a common data file format.

11. The computerized system of claim 10, wherein the received data is  
10 formatted in a common data file format for distribution and access by the client and server.

12. A computerized system for managing a media production, the computerized system comprising:

a server operatively connected to a network and to at least one client  
operatively connected to the network and to the server through the network, wherein each  
15 client includes at least one specialized module for receiving correspondingly specialized production data from a plurality of production departments, wherein each client transmits the received production data to the server;

wherein the specialized production data is formatted in a common format;

and

20 wherein the server provides the commonly formatted production data to an output device to facilitate monitoring and processing of the production data to manage the media production.

13. The computerized system of claim 12, wherein the specialized module of the client is selected from the group of:

25 a department coordinator module for allowing entry of department coordinator data for a production and for transmitting the entered department coordinator data to the server;

an assistant director module for allowing entry of assistant director data for the production and for transmitting the entered assistant director data to the server;

a creative module for allowing entry of creative data, including scripts and cast lists and for transmitting the entered creative data to the server;

an accounting module for allowing entry of accounting data and for transmitting the entered accounting data to the server; and

5 a visual effects module for allowing entry of visual effects data and for transmitting the entered visual effects data to the server.

14. The computerized system of claim 12, wherein the output device includes:

a graphic user interface accessible by a user for selectively presenting to the user the received production data received by the server.

10 15. The computerized system of claim 12, wherein the server posts the received production data on a website.

16. The computerized system of claim 15, wherein the network is the Internet on which the website is hosted.

17. A method for managing a media production, the method comprising the  
15 steps of:

receiving specialized production data from a plurality of production departments through a correspondingly specialized module on a client;

formatting the specialized production data in a common format;

transmitting the received production data to a server; and

20 providing the commonly formatted production data to an output device, thereby facilitating the monitoring and processing of the production data to manage the media production.

18. The method of claim 17, wherein step of receiving the specialized production data includes the step of receiving the specialized production data from  
25 correspondingly specialized modules selected from the group of:

a department coordinator module for allowing entry of department coordinator data for a production;

an assistant director module for allowing entry of assistant director data for the production;

a creative module for allowing entry of creative data, including scripts and cast lists;

an accounting module for allowing entry of accounting data; and  
a visual effects module for allowing entry of visual effects data.

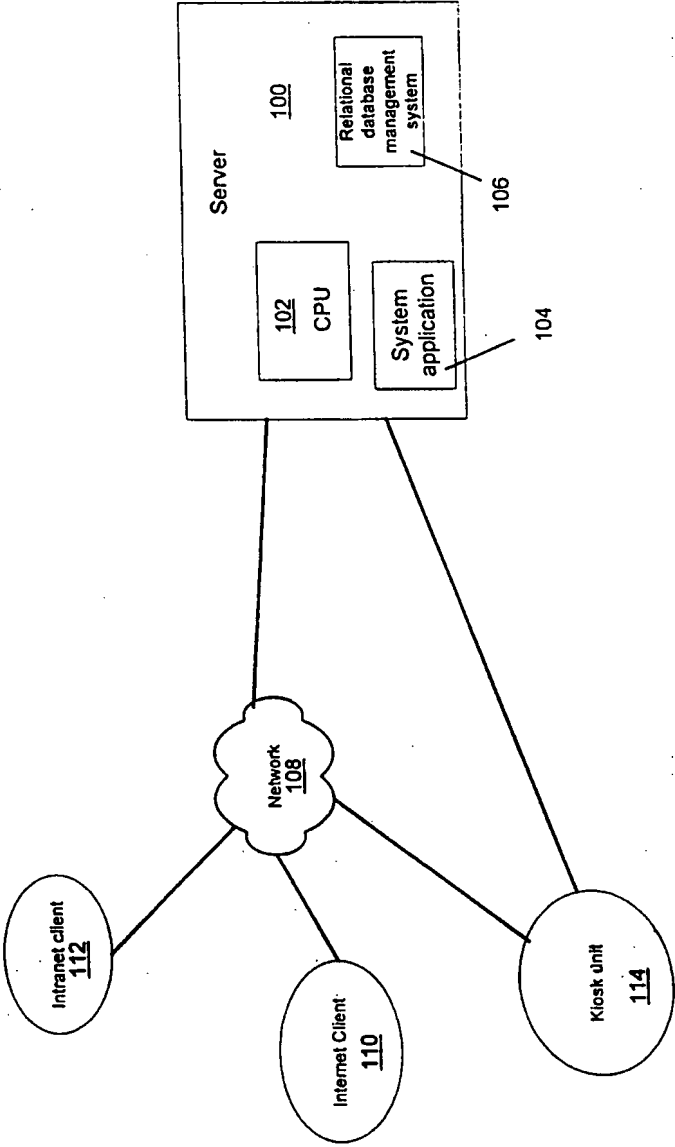
5           19. The method of claim 17, wherein the step of providing the commonly formatted production data to an output device includes:

providing the commonly formatted production data to a graphic user interface accessible by a user for selectively presenting to the user the received production data received by the server.

10           20. The method of claim 17, wherein the step of providing the commonly formatted production data to an output device includes the step of:

posting the received production data on a website accessible by the output device.

Fig. 1



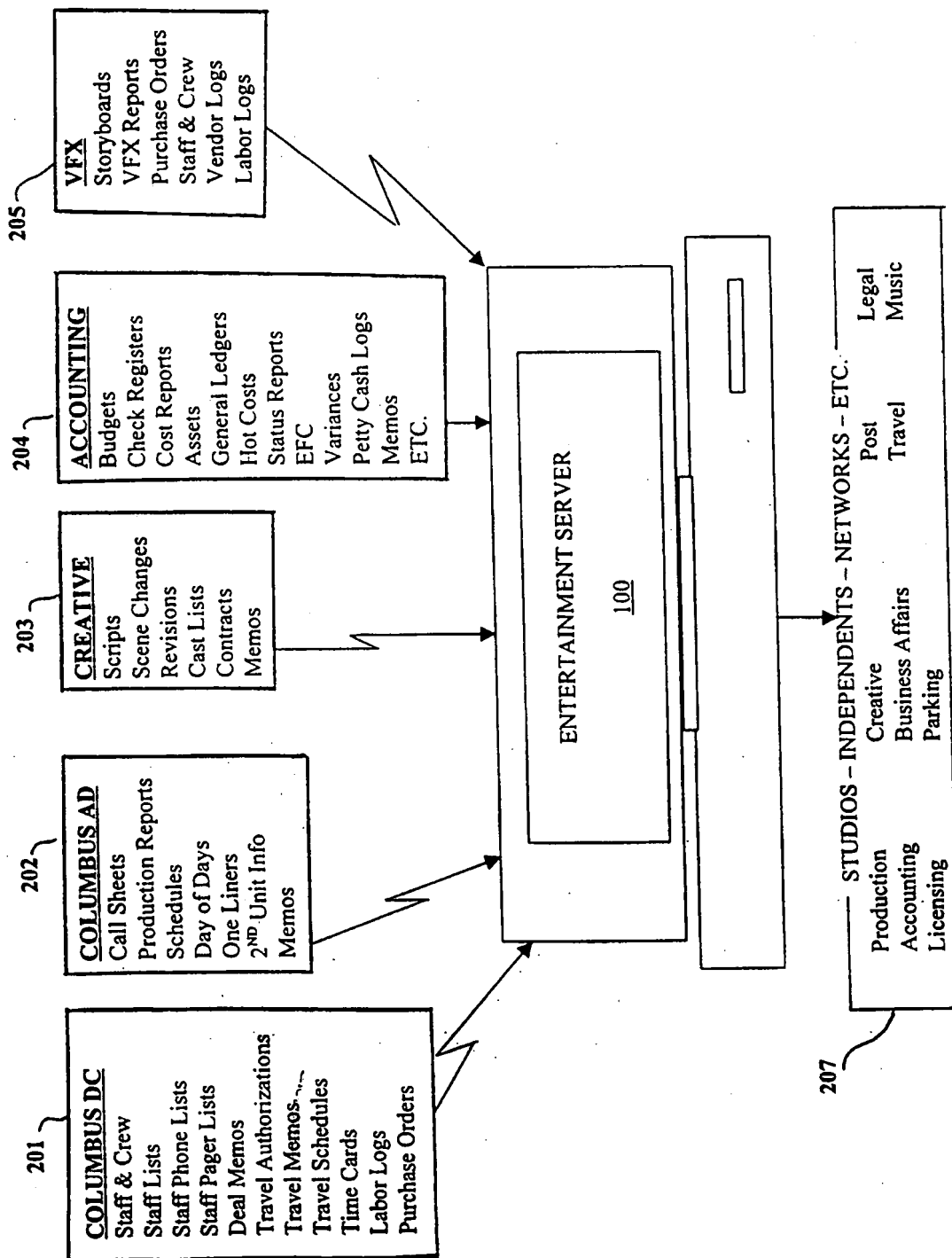


FIG. 2

Fig. 3

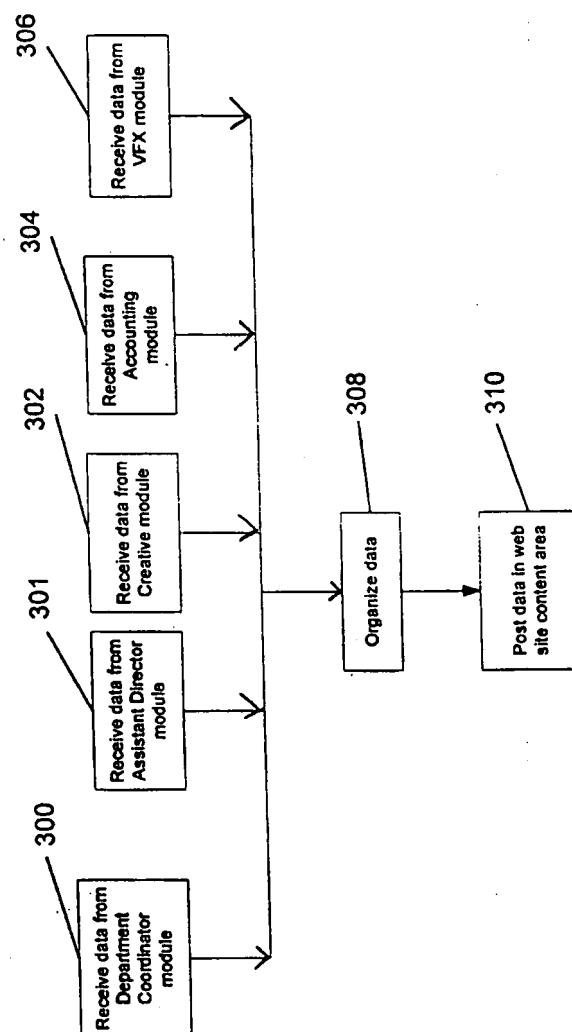




Fig. 4

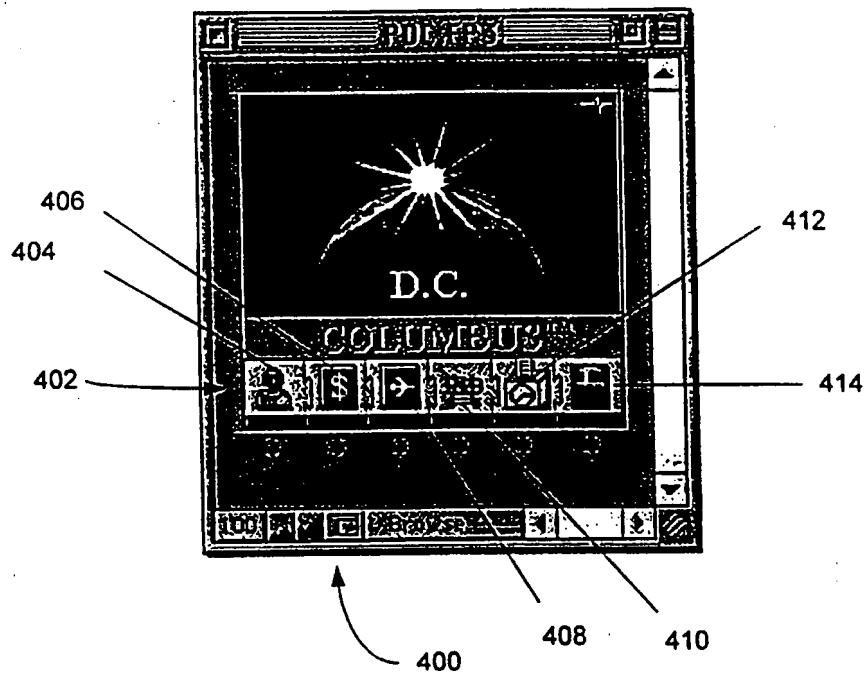


Fig. 5

518 504 508 506 502

STAFF CREW

PERSONAL INFORMATION

Full Name: Jane Doe

Search Country // Member Name: 555-22-2555 Clark 5/5/69

1st Assistant Director DGA

Director's Staff 99

PHONE

Home 310-555-5555

Office 310-555-5213

Steven Doe 310-555-5555

MISC. INFORMATION

55 Room 450

John Gersh Gersh Talent

555 West Wilshire

Beverly Hills CA 90210

USA

DEALS TO DATE

TRAVEL

500 510 514 512 516 520

Fig. 6

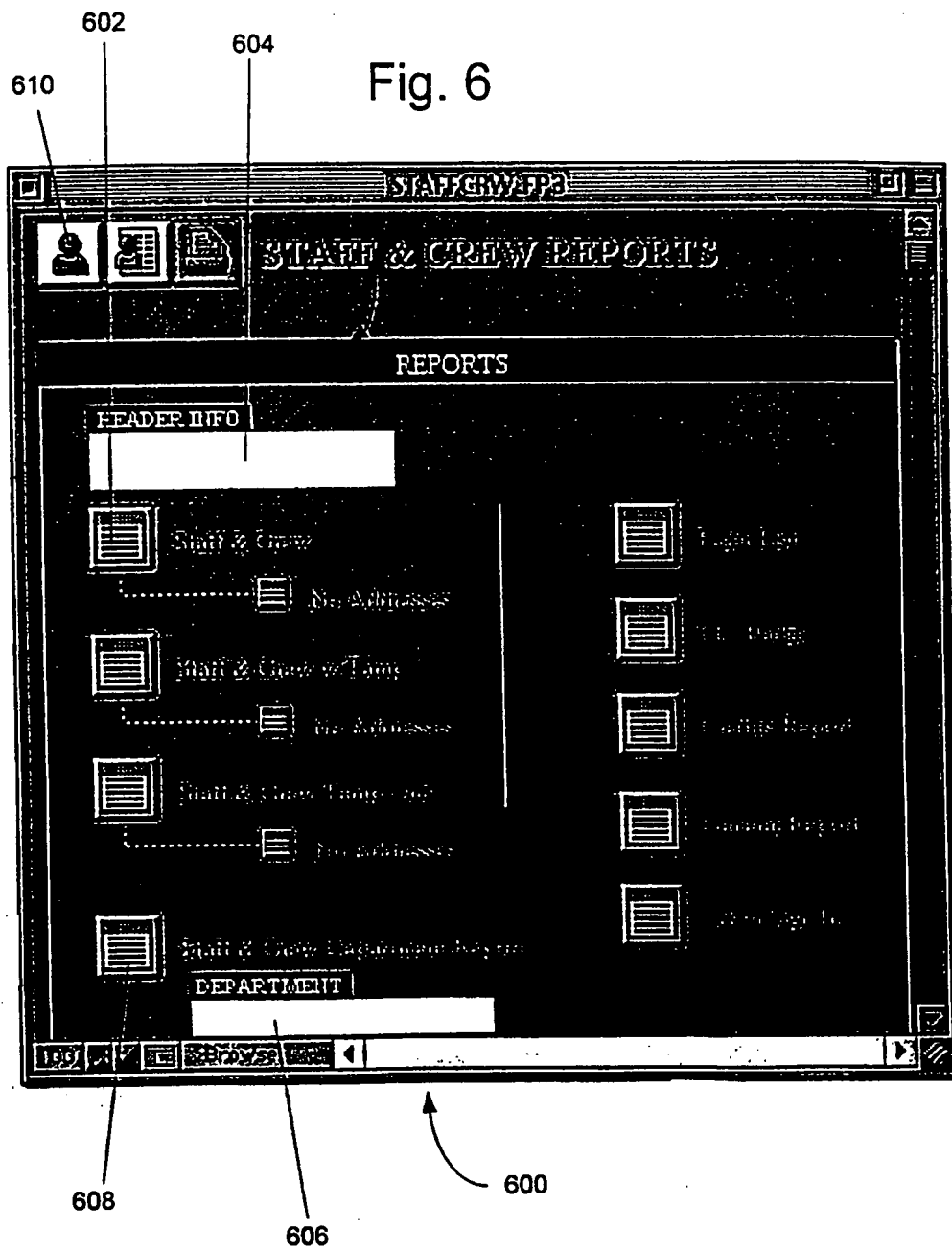


Fig. 7

[illegible]

700

Fig. 8

802 804

DEAL MEMO.PP3

**DEAL REPORTS**

**UNION & NON-UNION**

Union Case - Complete Package

Union Case Deal Memo

Telephone Start Case Form

19

Non-Union Case - Complete Package

Non-Union Case Deal Memo

Telephone Start Case Form

19

**OTHER REPORTS**

Other Deal Report

Deal Deal

FROM TO

7/8/97 7/11/97

DATE

7/8/97 7/11/97

HEADER INFO

**AUTOMATIC**

Auto Deal Package Form

**DCA**

Auto DCA Deal Package

DCA Deal Deal Memo

DCA Deal Deal Memo

Telephone Start Case Form

19

Self Identification

DCA Handwritten Deal Memo

FROM TO

7/8/97 7/11/97

DATE

7/8/97 7/11/97

QUARTER 1

2nd Quarter

PREPARED BY

ROH BARR

PHONE#

800

Fig. 9

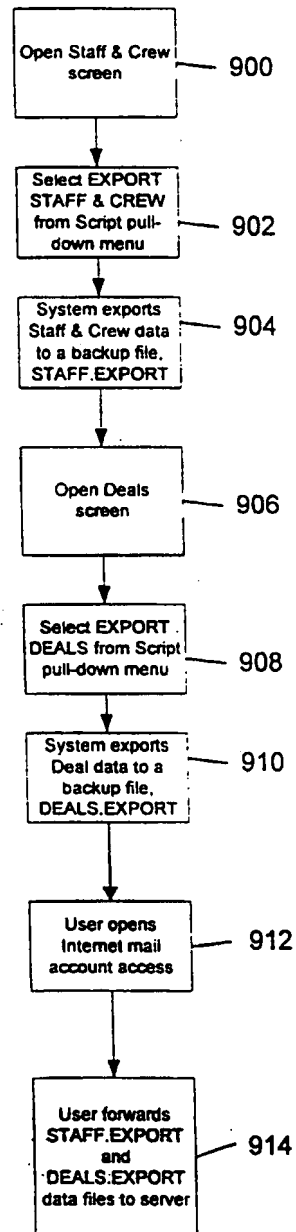




Fig. 11

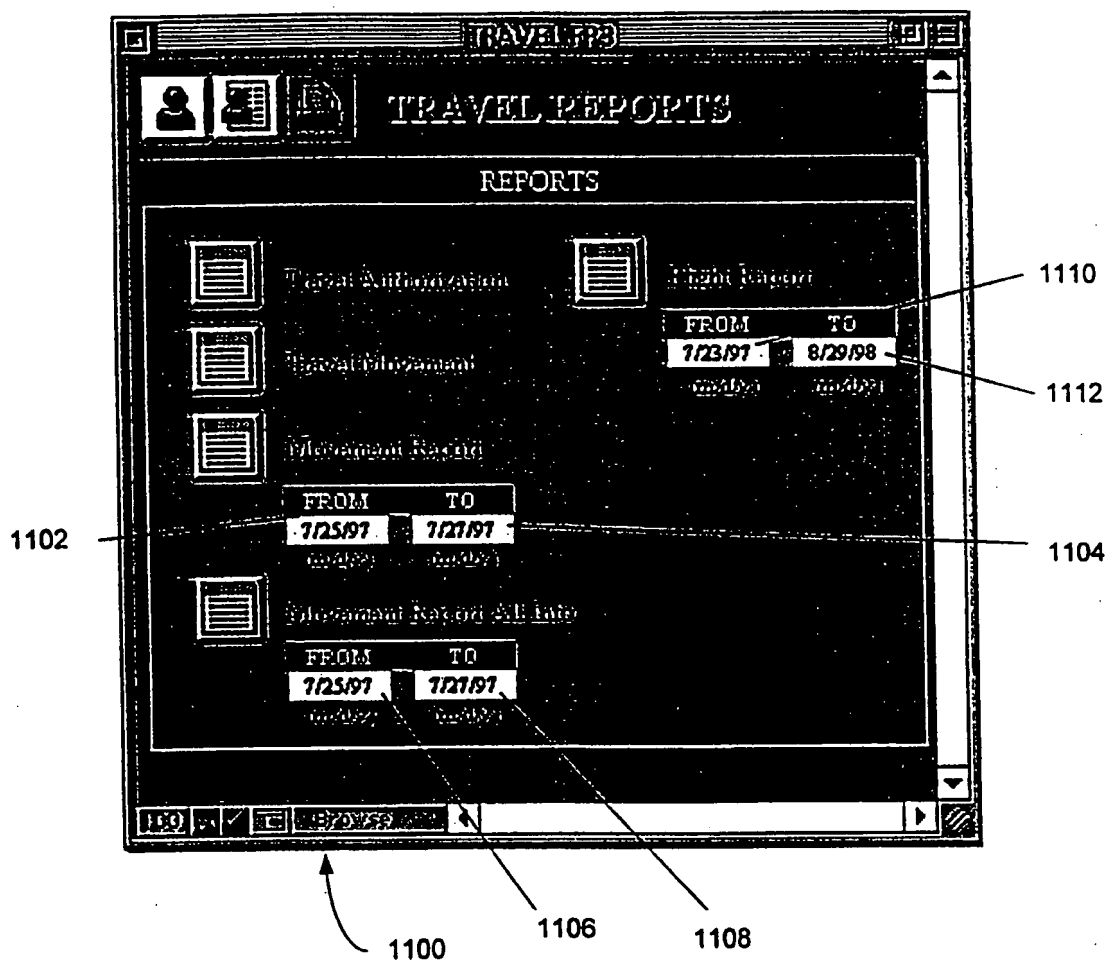




Fig. 12

1202

**PURCHASE ORDER**

Requested By: Jane Doe    Department: Construction    Project ID: 101 00    Show File: West World II    Date: 11/10/98    PO#: 125871

VENDOR		BILL TO		SHIP TO	
Company:	ACME Lumber	Company:	Net 30	Company:	
Address:	10201 West Olympic	Address:		Address:	
City:	Los Angeles	City:		City:	
State:	CA	State:		State:	
Zip:	90023	Zip:		Zip:	
Country:	USA	Country:		Country:	
Phone:	555-5555	Phone:		Phone:	
Fax:	310-555-1222	Fax:		Fax:	

Item Description	COMPARE	Department	Quantity	Cost	Extended Cost	Taxable
2x4x8		Construction	100	\$1.25	\$125.00	<input type="checkbox"/>
Nails		Construction	5	\$250.00	\$1,250.00	<input type="checkbox"/>
Notes:		Expendable	10100			

Prepared By: [ ]    Approved By: [ ]    Total Extended Cost: \$1,875.00  
 Tax Rate: 8.25%    Tax Amount: \$51.56  
 Grand Total: \$1,926.56

1206      1200      1204      1208

Fig. 13

P0003

**PURCHASE ORDER REPORTS**

**REPORTS**

<input type="checkbox"/> Current Purchase Order	<input type="checkbox"/> MTN List Report
<input type="checkbox"/> Historical Department Report	<input type="checkbox"/> FROM 10/15/98 TO 11/25/98
<input type="checkbox"/> DEPARTMENT	<input type="checkbox"/> Vendor
<input type="checkbox"/> Construction	<input type="checkbox"/> Historical Vendor Report
<input type="checkbox"/> End Department Report	<input type="checkbox"/> VENDOR
<input type="checkbox"/> Vendor	<input type="checkbox"/> Bob's Construction
<input type="checkbox"/> Vendor	<input type="checkbox"/> Full Vendor Report
<input type="checkbox"/> Vendor	<input type="checkbox"/> Vendor Count Report
<input type="checkbox"/> Vendor	<input type="checkbox"/> Assets Report

FROM 10/15/98 TO 11/25/98

1302 1300 1306 1304 1308

Fig. 14

1401

[illegible]

Fig. 15

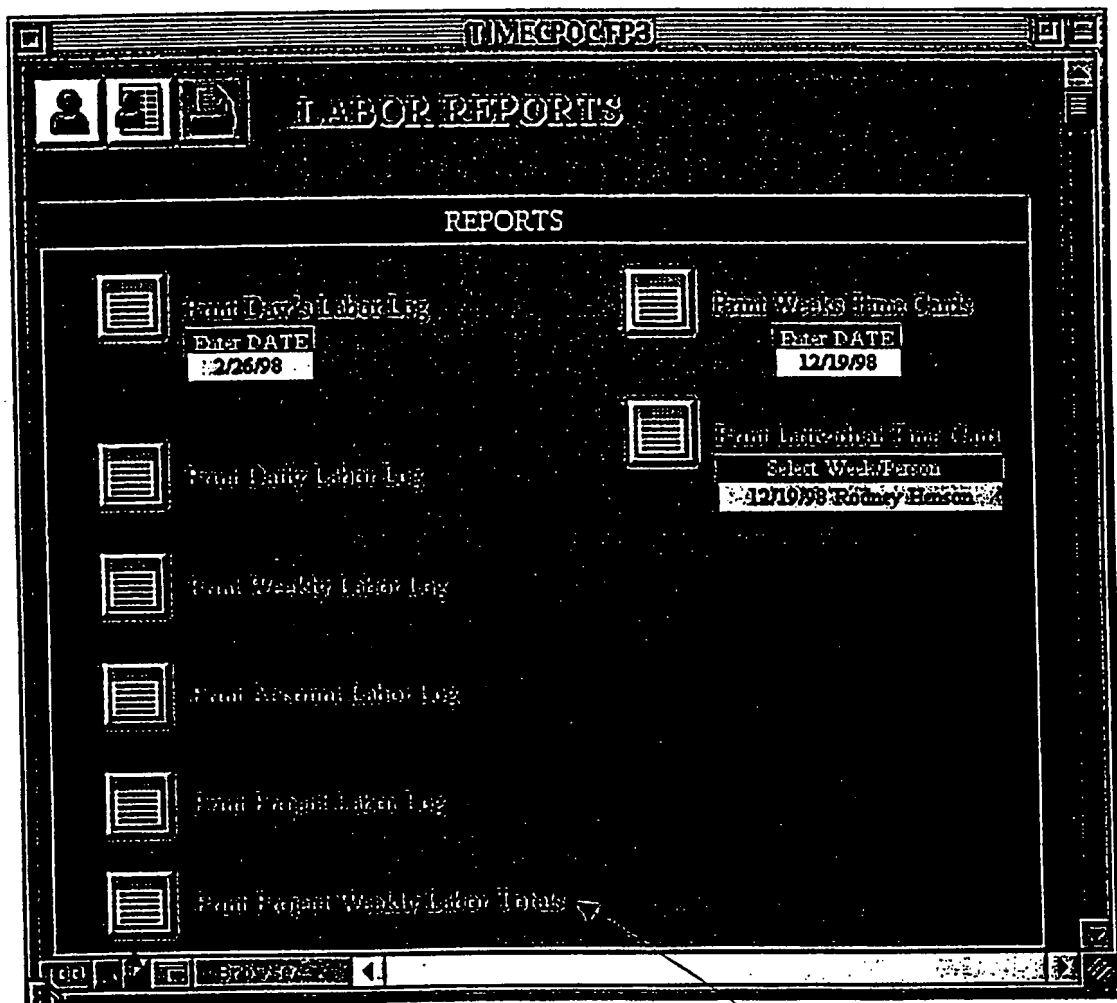


Fig. 16

[illegible]

Fig. 17

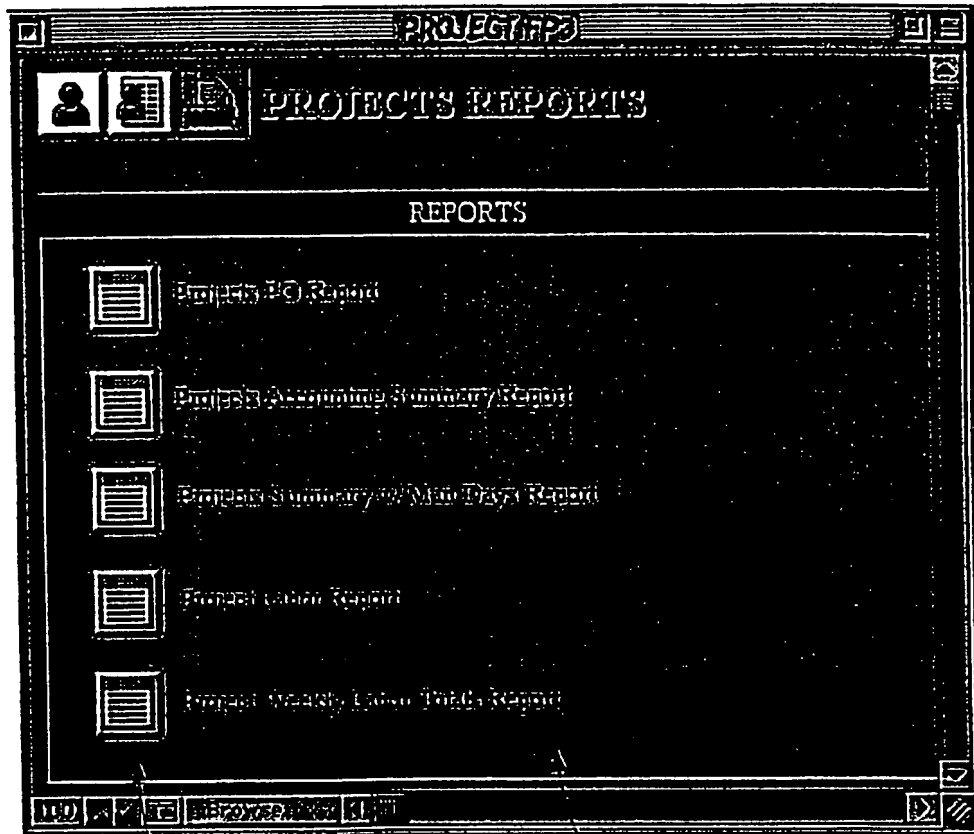


Fig. 18

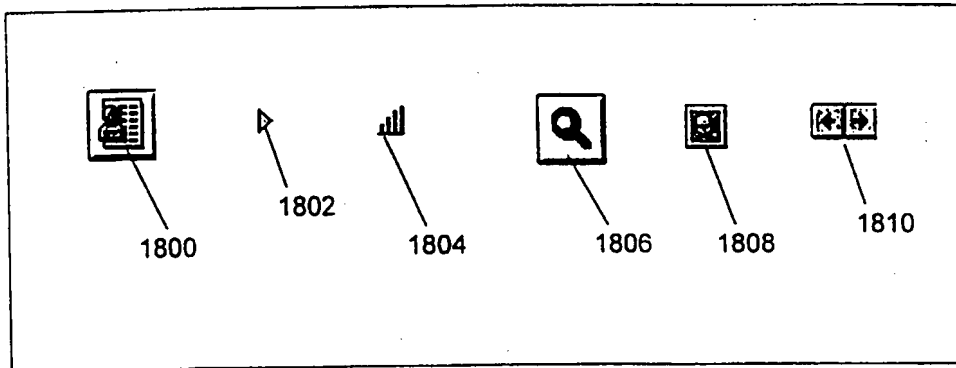


FIG. 19

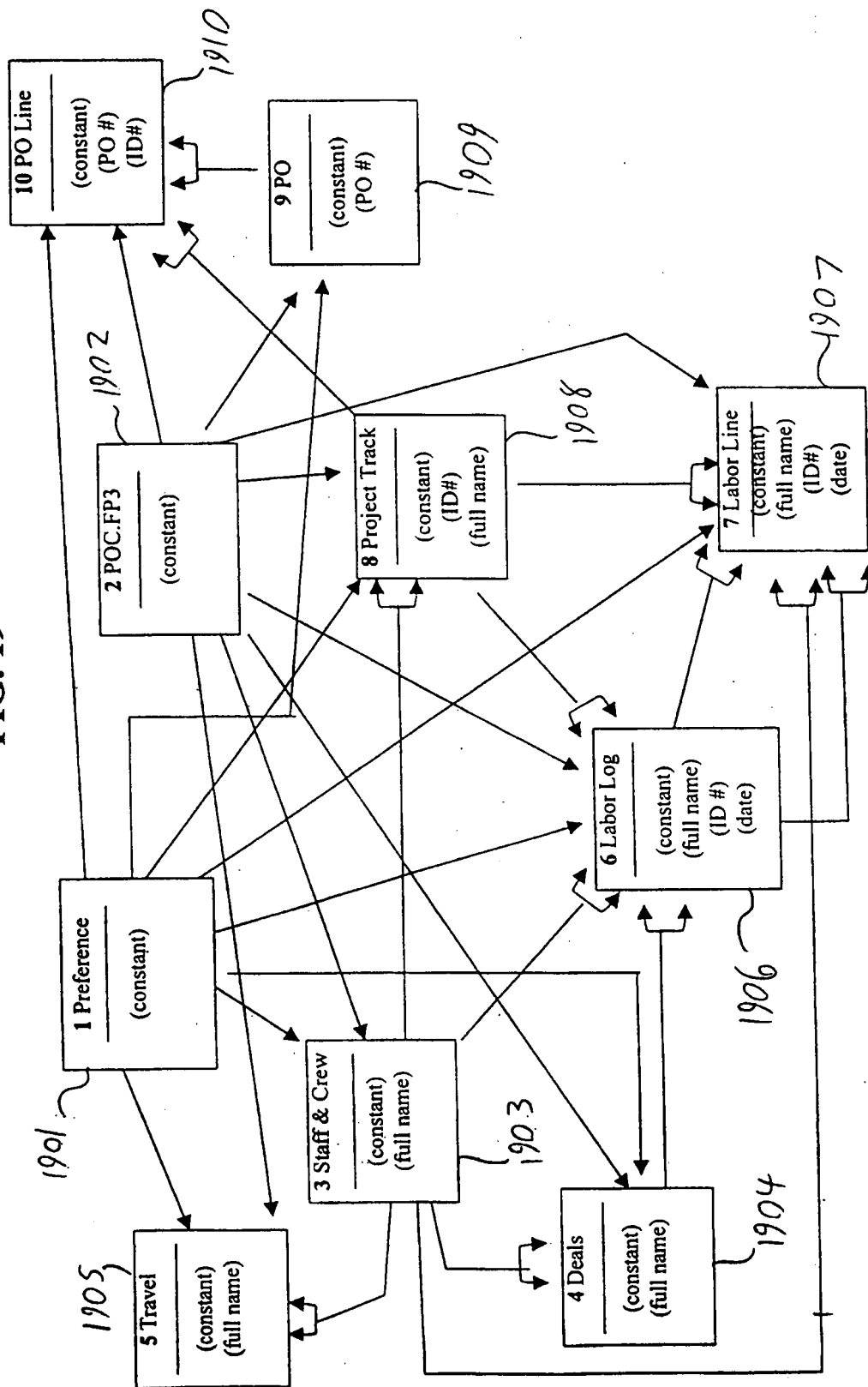




Fig. 20

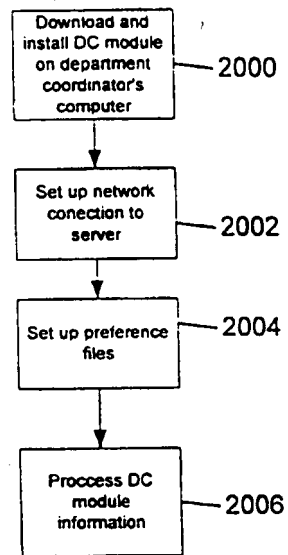


Fig. 21.

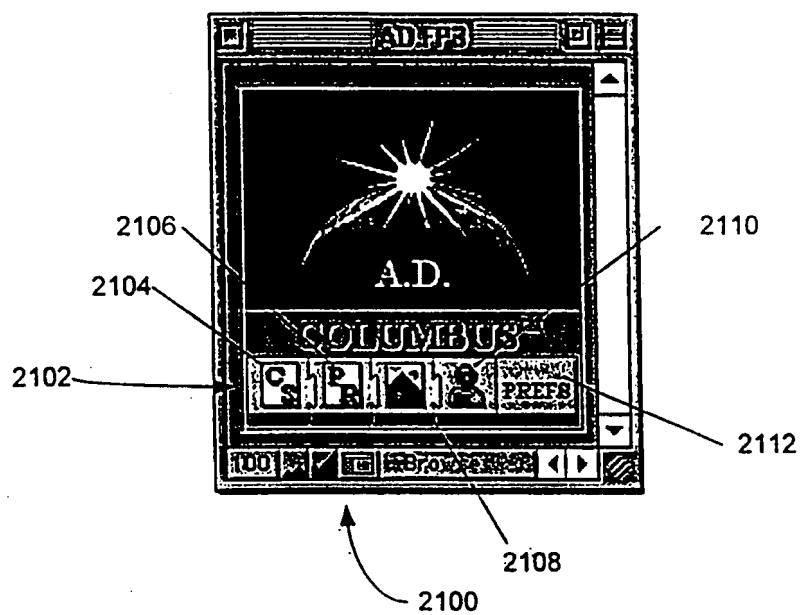


Fig. 22

2204

ADDRESS

Address

Street

City

State

Zip

Country

Phone

Fax

E-mail

Web

2200

2202

Fig. 23

2302 2304 2306

#	POSITION	NAME	TIME	O.C. #	POSITION	NAME	TIME	O.C. #	POSITION	NAME	TIME	O.C. #
	<b>PRODUCTION</b>			<input type="checkbox"/>	<b>MAKEUP</b>			<input type="checkbox"/>	<b>CATERING</b>			<input type="checkbox"/>
	Director			<input type="checkbox"/>	Key MU			<input type="checkbox"/>	FACS			<input type="checkbox"/>
	UPM			<input type="checkbox"/>	1st Asst. MU			<input type="checkbox"/>	FACS			<input type="checkbox"/>
	1st A.D.			<input type="checkbox"/>	Add'l MU			<input type="checkbox"/>	Caterers			<input type="checkbox"/>
	2nd A.D.			<input type="checkbox"/>				<input type="checkbox"/>	Chef			<input type="checkbox"/>
	3rd A.D.			<input type="checkbox"/>	<b>HAIR</b>			<input type="checkbox"/>	Asst. Chef			<input type="checkbox"/>
	T.A.D.			<input type="checkbox"/>	Key Hairstylist			<input type="checkbox"/>	Breakfast			<input type="checkbox"/>
	Script Super.			<input type="checkbox"/>	1st Asst. Hair			<input type="checkbox"/>	Lunch			<input type="checkbox"/>
	Prod Coord			<input type="checkbox"/>	Add'l Hair			<input type="checkbox"/>	Single Entrees			<input type="checkbox"/>
	Asst Coord			<input type="checkbox"/>				<input type="checkbox"/>				<input type="checkbox"/>
	Office P.A.			<input type="checkbox"/>	<b>WARDROBE</b>			<input type="checkbox"/>	<b>ACCOUNTING</b>			<input type="checkbox"/>
				<input type="checkbox"/>	Cost. Dgr			<input checked="" type="checkbox"/>	Prod Account.			<input checked="" type="checkbox"/>
	<b>CAMERA</b>			<input type="checkbox"/>	Asst. Designer			<input type="checkbox"/>	Asst. Acc.			<input type="checkbox"/>
	D.O.P.			<input type="checkbox"/>	Asst. Cost.			<input type="checkbox"/>	Asst. Acc.			<input type="checkbox"/>
	1A Cam Op	Paul Marchick		<input type="checkbox"/>	Set Super			<input type="checkbox"/>	Clerk			<input type="checkbox"/>
	1st Asst.	Trevr Holtbrook		<input type="checkbox"/>	Set Super			<input type="checkbox"/>				<input type="checkbox"/>

2308 2300

Fig. 24

2406 2402 2404

#	ACTOR NAME	CHARACTER NAME	LEAVE	MAKE-UP	SETCALL	REMARKS
1	John Weyman	Bobby	7:00	8:00	9:00	
2	Sarah James	Marc	8:00	8:30	10:00	
3	Willy Loman	Franklin	7:00	8:00	9:00	
4	Jennifer Bench	Jet	8:00	8:30	10:00	
5	Jerry Spring	Jenny	8:00	9:00	10:00	needs hairpiece

2400

Fig. 25

2506 2502 2504

SET/SEP3

Scene Info

Normal Shot  
Pan Shot  
Zoom In Shot  
Zoom Out Shot  
All Shots

SCENE	SLUGLINE	PAGES	CAST #'S	Notes
1	INT - ALIEN HALL - DAY	7/8	1,2,4	
	Set Description			2 Mark
	Set Location			4 Jet
	Down Hall, Enter Room			
	Notes			
2	INT - LINVRIS CHAMBER - DAY	7/8	1,2	
	Set Description			2 Mark
	Set Location			4 Jet
	DISCOVER CORPSES			
	Notes			
3	INT - LINVRIS CHAMBER - DAY	2	1,4	
	Set Description			2 Mark
	Set Location			4 Jet
	CONTINUES, FIND DEVICE & PTD			
	Notes			
5	INT - LOCKER ROOM - DAY	4/8	1,2	
	Set Description			2 Mark
	Set Location			
	WHISPERING VOICES IN ROOM			
	Notes			

2500

Fig. 26

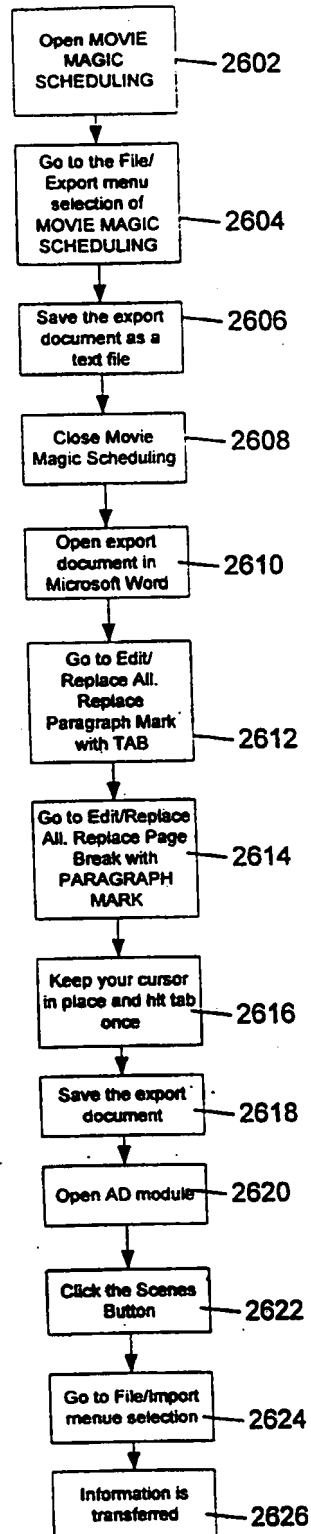


Fig. 27

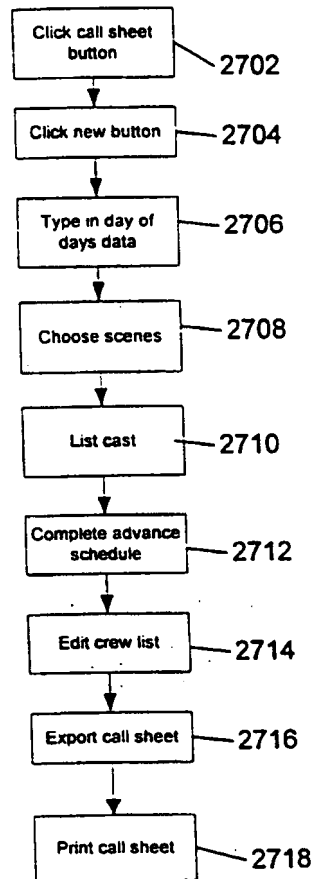




Fig. 28

2802

3/24/99-First Uni  
 3/25/99-First Uni  
 3/31/99-First Uni

2804

IMPORT DAY

2812

FILM

2806

SHOW # 444

EPISODE # 4619

Set	Set
Total	Total
Scenes	Pages
1/8	1/8
Set	444
Total	4619
Time	

HH:MM:SS

(Only adjustable in first record of each show or episode.)

Scene	Page	Set	Time	Scene	Scene
Scene 1		0:00:00	0:00:00	0	0
Scene 2					
Scene 3					
Scene 4					
Scene 5					
Scene 6					
Scene 7					
Scene 8					
Scene 9					
Scene 10					
Scene 11					
Scene 12					
Scene 13					
Scene 14					
Scene 15					
Scene 16					
Scene 17					
Scene 18					
Scene 19					
Scene 20					
Scene 21					
Scene 22					
Scene 23					
Scene 24					
Scene 25					
Scene 26					
Scene 27					
Scene 28					
Scene 29					
Scene 30					
Scene 31					
Scene 32					
Scene 33					
Scene 34					
Scene 35					
Scene 36					
Scene 37					
Scene 38					
Scene 39					
Scene 40					
Scene 41					
Scene 42					
Scene 43					
Scene 44					
Scene 45					
Scene 46					
Scene 47					
Scene 48					
Scene 49					
Scene 50					
Scene 51					
Scene 52					
Scene 53					
Scene 54					
Scene 55					
Scene 56					
Scene 57					
Scene 58					
Scene 59					
Scene 60					
Scene 61					
Scene 62					
Scene 63					
Scene 64					
Scene 65					
Scene 66					
Scene 67					
Scene 68					
Scene 69					
Scene 70					
Scene 71					
Scene 72					
Scene 73					
Scene 74					
Scene 75					
Scene 76					
Scene 77					
Scene 78					
Scene 79					
Scene 80					
Scene 81					
Scene 82					
Scene 83					
Scene 84					
Scene 85					
Scene 86					
Scene 87					
Scene 88					
Scene 89					
Scene 90					
Scene 91					
Scene 92					
Scene 93					
Scene 94					
Scene 95					
Scene 96					
Scene 97					
Scene 98					
Scene 99					
Scene 100					

2808

2814

Scene	Page	Set	Time	Scene	Scene
5248					
5298					
5245					
5293					
7245					

2810

FIG. 29

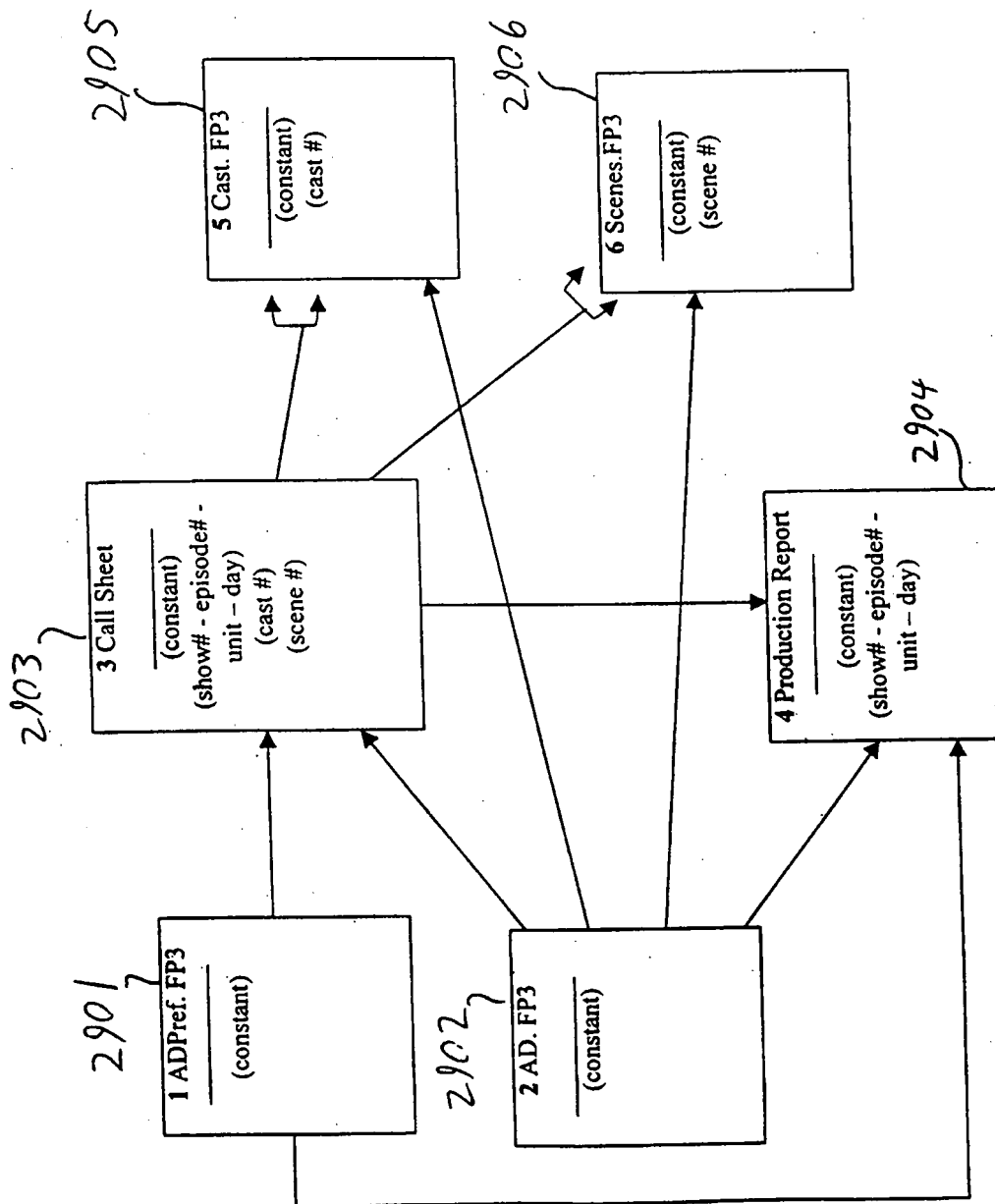


Fig. 30

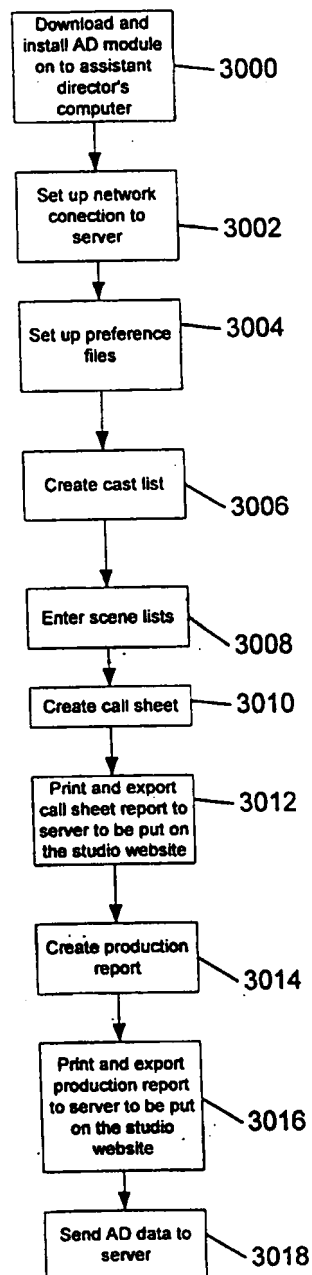
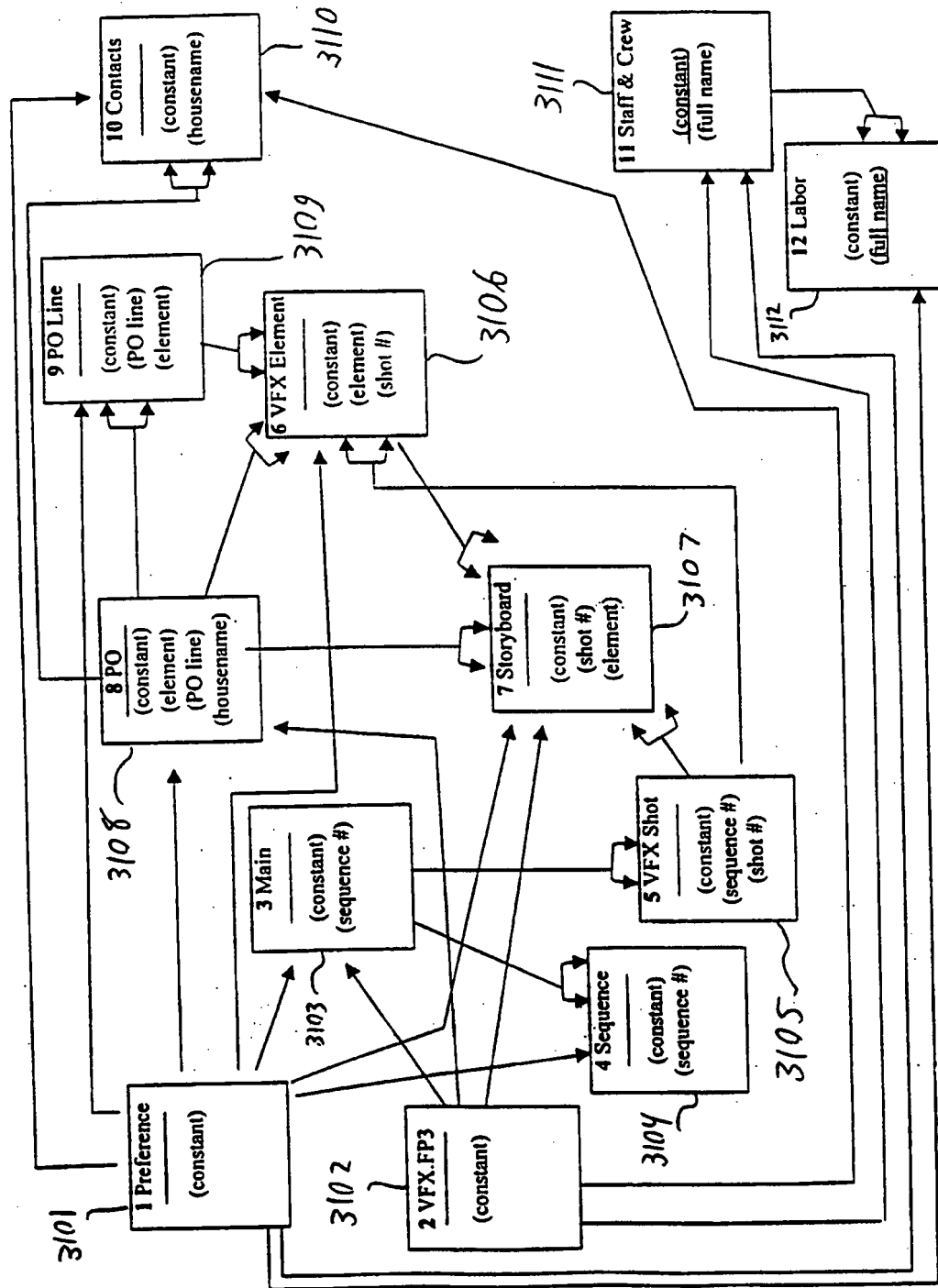


FIG. 31



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/11443

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06F 15/16

US CL : 709/202, 203

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/202, 203, 217, 218, 219, 246;

707/9, 104, 501, 516

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Microsoft Press Computer Dictionary

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST, Derwent WPI

search terms: convert\*, translat\*, report\*, pdf, production, html

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,802,518 A (KARAEV et al.) 01 September 1998, col. 5, line 65 - col. 8, line 1, especially col. 3, lines 21-42	1-20
Y, P	US 5,960,074 A (CLARK) 28 September 1999, col. 5, lines 38-43, col. 6, lines 38-51	1-20
A, P	US 5,978,818 A (LIN) 02 November 1999, abstract	1-20
A	US 5,864,871 A (KITAIN et al.) 26 January 1999, abstract	1-20

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*A* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

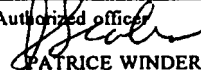
06 JULY 2000

Date of mailing of the international search report

15 AUG 2000

 Name and mailing address of the ISA/US  
 Commissioner of Patents and Trademarks  
 Box PCT  
 Washington, D.C. 20231

Facsimile No. (703) 305-3230

 Authorized officer  
  
 PATRICE WINDER

Telephone No. (703) 305-3938